



Agenda

Greenville City Council

June 10, 2010
7:00 PM
City Council Chambers
200 West Fifth Street

Assistive listening devices are available upon request for meetings held in the Council Chambers. If an interpreter is needed for deaf or hearing impaired citizens, please call 252-329-4422 (voice) or 252-329-4060 (TDD) no later than two business days prior to the meeting.

I. Call Meeting To Order

II. Invocation - Council Member Glover

III. Pledge of Allegiance

IV. Roll Call

V. Approval of Agenda

VI. Special Recognitions

- Ronnie Purvis, Recreation and Parks Department Retiree
- Fair Housing Poster Contest Recognition and Award

VII. Appointments

1. Appointments to boards and commissions
2. Nomination to the Pitt County Commissioners of three persons to serve as Chairperson of the Pitt-Greenville Convention and Visitors Authority

VIII. New Business

Public Hearings

3. Ordinance requested by the Community Development Department to amend the Historic Preservation Regulations to include a new section related to the use and location of residential

solar collectors on locally designated historic properties and within locally designated historic districts

4. Resolution to close portions of Twelfth Street and Lawrence Street
5. Ordinance requiring the repair or the demolition and removal of the dwelling located at 1224 Davenport Street
6. Ordinance requiring the repair or the demolition and removal of the dwelling located at 1117 Douglas Avenue
7. Ordinance requiring the repair or the demolition and removal of the dwelling located at 212 Manhattan Avenue
8. Ordinance requiring the repair or the demolition and removal of the dwelling located at 1505 Myrtle Avenue
9. Ordinance requiring the repair or the demolition and removal of the dwelling located at 1506 Myrtle Avenue
10. Resolution authorizing the sale of City-owned property at 907 Douglas Avenue
11. Resolution authorizing an application to the Federal Transit Administration for a Section 5307 grant for federal operating and capital assistance for Greenville Area Transit
12. Application for funds from the federal Edward Byrne Memorial Justice Assistance Grant Program
13. Updates to the Manual of Standard Designs and Details

Public Comment Period

- The Public Comment Period is a period reserved for comments by the public. Items that were the subject of a public hearing at this meeting shall not be discussed. A total of 30 minutes is allocated with each individual being allowed no more than 3 minutes. Individuals who registered with the City Clerk to speak will speak in the order registered until the allocated 30 minutes expires. If time remains after all persons who registered have spoken, individuals who did not register will have an opportunity to speak until the allocated 30 minutes expires.

Other Items of Business

14. Resolution adopting the 2010 Local Hazard Mitigation Plan
15. Establish fair market value for the City-owned home at 604 Ford Street
16. Ordinances adopting budgets for the 2010-2011 Fiscal Year and Operating Plans for Fiscal Year

2011-2012:

- a. City of Greenville including Sheppard Memorial Library and Pitt-Greenville Convention and Visitors Authority
- b. Greenville Utilities Commission

IX. Comments from Mayor and City Council

X. City Manager's Report

XI. Adjournment



City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

Title of Item: Appointments to boards and commissions

Explanation: City Council appointments or reappointments need to be made to the Board of Adjustment, Greenville Utilities Commission, Housing Authority, Human Relations Council, Pitt-Greenville Airport Authority, Pitt-Greenville Convention and Visitors Authority, Public Transportation and Parking Commission, and Recreation and Parks Commission. Also, a request is being made to switch the slotted seats of two individuals who are currently serving on the Environmental Advisory Commission.

Fiscal Note: No fiscal impact.

Recommendation: To make appointments or reappointments to the Board of Adjustment, Greenville Utilities Commission, Housing Authority, Human Relations Council, Pitt-Greenville Airport Authority, Pitt-Greenville Convention and Visitors Authority, Public Transportation and Parking Commission, and Recreation and Parks Commission.

To switch the slotted seats on the Environmental Advisory Commission to appoint James Holley to serve as the "at-large member from the Greenville community" and to appoint Edward Caldwell to serve as the "at-large member from the Greenville community with skills and interest in environmental health, safety, and/or medicine".

Attachments / click to download

 [Appointments To Boards and Commissions City Council Meetings Agenda Deadline Material 138519](#)

Appointments to Boards and Commissions

June 10, 2010

Board of Adjustment

Council Liaison: Council Member Marion Blackburn

Name	Current Term	Reappointment Status	Expiration Date
Ann Bellis (Regular member)	Second term	Ineligible	June 2010
Sharon Ferris (Alternate #3)	Filling unexpired term	Eligible	June 2010
Charles Ward (Regular member)	First term	Eligible	June 2010

Environmental Advisory Commission

Council Liaison: Council Member Marion Blackburn

This request is not filling a vacancy, but the request is to switch the designation of these two individuals as to the slotted seat that they are fulfilling. Their terms and term expiration dates will not change. Below is what they are currently holding,

Name	Current Term	Reappointment Status	Expiration Date
Edward Caldwell (6)	Second term	Ineligible	April 2012
James Holley (7)	First term	Eligible	April 2013

and the following is being recommended:

Name	Current Term	Reappointment Status	Expiration Date
Edward Caldwell (7)	Second term	Ineligible	April 2012
James Holley (6)	First term	Eligible	April 2013

(6) An at-large member from the Greenville community

(7) An at-large member from the Greenville community with skills and interest in environmental health, safety, and/or medicine

Greenville Utilities Commission

Council Liaison: Mayor Pro-Tem Bryant Kittrell

<u>Name</u>	<u>Current Term</u>	<u>Reappointment Status</u>	<u>Expiration Date</u>
Lester Brown	Second term	Ineligible	June 30, 2010
Don Edmonson	First term	Eligible	June 30, 2010
Vickie Joyner	First term	Eligible	June 30, 2010

Housing Authority

Council Liaison: Mayor Pro-Tem Bryant Kittrell

<u>Name</u>	<u>Current Term</u>	<u>Reappointment Status</u>	<u>Expiration Date</u>
Barbara Taft (Housing Authority Nomination)	Second term	Did not wish to be reappointed	May 31, 2010

Human Relations Council

Council Liaison: Council Member Max Joyner, Jr.

Regular Members

<u>Name</u>	<u>Current Term</u>	<u>Reappointment Status</u>	<u>Expiration Date</u>
Ann Marie Alderman	Filling unexpired term	Resigned	September 2010
James Cox	Second term	Resigned	September 2010

Pitt-Greenville Airport Authority

Council Liaison: Council Member Max Joyner, Jr.

<u>Name</u>	<u>Current Term</u>	<u>Reappointment Status</u>	<u>Expiration Date</u>
Donald Taylor	First term	Eligible	June 2010

Pitt-Greenville Convention and Visitors Authority

Council Liaison: Council Member Rose Glover

<u>Name</u>	<u>Current Term</u>	<u>Reappointment Status</u>	<u>Expiration Date</u>
Candace Hollingsworth (1) County; City Hotel/Bistro	Filling unexpired term	Eligible	July 2010
Ivory Mewborn (3) County	Filling unexpired term	Eligible	July 2010

James Streeter (3) City	Second term	Ineligible	July 2010
John Van Coutren (1) City; Hilton	First term	Eligible	July 2010

- (1) Owners/operators of hotels/motels
(3) Residents not involved in tourist or convention-related business

Public Transportation and Parking Commission

Council Liaison: Council Member Kandie Smith

<u>Name</u>	<u>Current Term</u>	<u>Reappointment Status</u>	<u>Expiration Date</u>
Mary Fedash	Filling unexpired term	Moved out of city limits	January 2011
Steven Kresch	Filling unexpired term	Resigned	January 2012

Recreation and Parks Commission

Council Liaison: Council Member Marion Blackburn

<u>Name</u>	<u>Current Term</u>	<u>Reappointment Status</u>	<u>Expiration Date</u>
Gary Hassell	Second term	Ineligible	May 31, 2010
Wilson McDowell	Second term	Ineligible	May 31, 2010

Applicants for Board of Adjustment

Jeremy Jordan 707 West 4th Street Greenville, NC 27834	341-3066	Application Date: 6/25/2009 District: #1
Justin Mullarkey 207 Kenilworth Road Greenville, NC 27858	364-1183	Application Date: 5/4/2010 District: #4
Deryck Steven Wilson 1203 Franklin Drive Greenville, NC 27858	714-5950	Application Date: 11/7/2008 District: #3

Applicants for Greenville Utilities Commission

Charles H. Farley 206 Oxford Road Greenville, NC 27858	355-6474	Application Date: 2/12/2009 District: #4
Andy Miller 3406 Foxwood Lane Greenville, NC 27858	717-2750	Application Date: 8/26/2009 District: #4
John F. Minges 3304 Grey Fox Trail Greenville, NC 27858	756-4303	Application Date: 3/29/2010 District: #4
Don M. Wilkerson 3714 Cantata Drive Greenville, NC 27858	355-7331	Application Date: 3/5/2009 District: #4

Applicants for Human Relations Council

Gloria Brewington-Person 1005 Cortland Road Greenville, NC 27834	321-3227	Application Date: 10/1/2009 District: #2
Brian Brown 2237 Penncross Drive Greenville, NC 27834	367-5831	Application Date: 9/11/2009 District: #5
Emily Carter 113 Avon Lane Greenville, NC 27858	919-356-6687	Application Date: 1/15/2010 District: #4
Ronnie Christian 2608 Mulberry Lane Greenville, NC 27858	561-5405	Application Date: 7/2/2008 District: #5
Ann Eleanor 102 Lindenwood Drive Greenville, NC 27834	848-4257	Application Date: 2/10/2009 District: #5
Eric Foushee 4113 Dublin Road Winterville, NC 28590	902-7286	Application Date: 4/14/2010 District: #5
Corey Rhodes 3911 Sterling Pointe Drive, #006 Winterville, NC 28590	916-4523	Application Date: 2/11/2009 District: #5

Applicants for Pitt-Greenville Airport Authority

Brian Brown 2237 Penncross Drive Greenville, NC 27834	367-5831	Application Date: 9/11/2009 District: #5
Charles H. Farley 206 Oxford Road Greenville, NC 27858	355-6474	Application Date: 2/12/2009 District: #4
Carlton Floyd 104 East Catawba Road Greenville, NC 27834	757-3302	Application Date: 7/25/2008 District: #1
Terry King 1310 Thomas Langston Rd. #7 Winterville, NC 28590	321-6996	Application Date: 2/18/2009 District: #5
Will Litchfield 310 Dupont Circle Greenville, NC 27858	364-2243	Application Date: 4/9/2010 District: #5
Henry C. McNeese 119 Asbury Road Greenville, NC 27858	355-7176	Application Date: 10/15/2008 District: #4
Corey Rhodes 3911 Sterling Pointe Drive, #006 Winterville, NC 28590	916-4523	Application Date: 2/11/2009 District: #5
Don M. Wilkerson 3714 Cantata Drive Greenville, NC 27858	355-7331	Application Date: 3/5/2009 District: #4

Applicants for Pitt-Greenville Convention and Visitors Authority (City of Greenville)

Brian Brown 2237 Penncross Drive Greenville, NC 27834	Application Date: 9/11/2009 367-5831	Occupation: President/CEO Rep Express, LLC District: #5
Emily Carter 113 Avon Lane Greenville, NC 27858	Application Date: 1/15/2010 (919) 356-6687	Occupation: American Campus Communities, General Manager District: #4
Vondia Clary-Huff 1055 Waterford Commons Drive Greenville, NC 27834	Application Date: 11/10/2008 341-6667	Occupation: General Manager Candlewood Suites District: #1
Charles Farley 206 Oxford Road Greenville, NC 27858	Application Date: 2/12/2009 355-6474	Occupation: Electrical Engineer Voice of America District: #4
Carlton Floyd 104 East Catawba Road Greenville, NC 27834	Application Date: 7/25/2008 757-3302	Occupation: Retired Teacher Pitt County Schools District: #1
Earnestine Haselrig 1100 Fairfax Avenue Greenville, NC 27834	Application Date: 3/11/2010 758-4545	Occupation: Retired District: #1

Applicants for Pitt-Greenville
Convention and Visitors Authority
(City of Greenville)
Page 2

Jeffrey Johnson
2008 Pinecrest Drive
Greenville, NC 27858

Application Date: 2/12/2009

355-0644 **Occupation:** Owner,
4 C's Group, Inc.
District: #4

Terry King
1310 Thomas Langston Road, Unit #7
Winterville, NC 28590

Application Date: 2/18/2009

321-6996 **Occupation:** Unemployed –
Workforce Reduction
District: #5

Corey Rhodes
3911 Sterling Pointe Drive, #006
Winterville, NC 28590

Application Date: 2/19/2009

916-4523 **Occupation:** Employed at Rhodes
Learning Group
District: #5

Ray M. Spears, Jr.
3609 Prestwick Place
Greenville, NC 27834

Application Date: 9/18/2009

364-2565 **Occupation:** Retired
District: #1

Richard Weir
2074-3 Old Fire Tower Road
Greenville, NC 27858

Application Date: 10/10/2008

531-8817 **Occupation:** Night Manager,
Travelodge of Greenville
District: #5

Applicants for Public Transportation and Parking Commission

Richard Malloy Barnes
208 South Elm Street, Apt. N
Greenville, NC 27858 752-5278

Application Date: 3/23/2009
District: #3

Nancy Ray
2752 Meridian Park, Apt. 1
Greenville, NC 27834 367-7860

Application Date: 5/13/2010
District: #2

Applicants for Recreation and Parks Commission

Paul C. Anderson 3704 Tucker Dr. Greenville, NC 27858	752-6880	Application Date: 10/21/2008 District: #4
Joseph P. Flood 1919 Sherwood Drive Greenville, NC 27858	353-9915	Application Date: 2/10/2009 District: #4
Carlton Floyd 104 East Catawba Road Greenville, NC 27834	757-3302	Application Date: 7/25/2008 District: #1
Eric Foushee 4113 Dublin Road Winterville, NC 28590	902-7286	Application Date: 4/14/2010 District: #5
Jeffrey Johnson 2008 Pinecrest Drive Greenville, NC 27858	355-0644	Application Date: 2/12/2009 District: #4
Allison Moran-Wasklewicz 3310 Cadenza Street Greenville, NC 27858	227-4505	Application Date: 8/27/2009 District: #4
Al Muller 212 Bristol Court Greenville, NC 27834	756-4299	Application Date: 8/18/2009 District: #5
Knox Oakley 3906 Bach Circle Greenville, NC 27858	321-6970	Application Date: 5//15/2010 District: #4
Ray M. Spears 3609 Prestwick Place Greenville, NC 27834	364-2565	Application Date: 9/18/2009 District: #1
L. H. Zincone 1730 Beaumont Drive Greenville, NC 27858	756-0071	Application Date: 8/15/2008 District: #4



City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

Title of Item: Nomination to the Pitt County Commissioners of three persons to serve as Chairperson of the Pitt-Greenville Convention and Visitors Authority

Explanation: In accordance with Section 7 of the interlocal agreement between the City of Greenville, the County of Pitt, and the Pitt-Greenville Convention and Visitors Authority, "...the Chairman of the Authority shall be designated by the Board of Commissioners of the County from a list of three (3) members of the Board of Directors nominated by the City Council of the City." The current Chairman is James Streeter, whose second three-year term expires in July 2010. Because Mr. Streeter will be completing a second term and will be ineligible for reappointment, a nomination of three members needs to be submitted to the Pitt County Commissioners so that they may select a Chairman from the list in accordance with the interlocal agreement. The current members are:

Kurt Davis (County Appointee), who is filling an unexpired term that expires in July 2011

Joseph Fridgen (Current Vice-Chair who is a City Nominee/County Appointee), who is serving a second term that expires in July 2012

Thomas Hines (County Appointee), who is serving a second term that expires in July 2011

Candace Hollingsworth (City Nominee/County Appointee), who is filling an unexpired term that expires in July 2010

Ivory Mewborn (County Appointee), who is filling an unexpired term that expires in July 2010

Linda Pleasants (City Nominee/County Appointee), who is serving a first term that expires in July 2011

Terry Shank (City Nominee/County Appointee), who is serving a first term that expires in July 2011

Robert Sheck (County Appointee), who is serving a first term that expires in July 2012

James Streeter (City Nominee/County Appointee), who is completing a second term that expires in July 2010

Jon Van Coutren (City Nominee/County Appointee), who is completing a first term that expires in July 2010

Chris Woelkers (Chamber of Commerce Appointee), who is serving a first term that expires in July 2012

Fiscal Note: No cost to the City.

Recommendation: Nominate three members of the Pitt-Greenville Convention and Visitors Authority to the Pitt County Commissioners for appointment as Chairperson.

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / [click to download](#)



City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

Title of Item: Ordinance requested by the Community Development Department to amend the Historic Preservation Regulations to include a new section related to the use and location of residential solar collectors on locally designated historic properties and within locally designated historic districts

Explanation: The North Carolina General Statutes were recently amended concerning the use and location of residential solar collectors. G.S. 160A-201 as adopted reads as follows:

"160A-201. Limitations on regulating solar collectors

(a) Except as provided in subsection (c) of this section, no city ordinance shall prohibit, or have the effect of prohibiting, the installation of a solar collector that gathers solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, or generating electricity for a residential property, and no person shall be denied permission by a city to install a solar collector that gathers solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, or generating electricity for a residential property. As used in this section, the term "residential property" means property where the predominant use is for residential purposes.

(b) This section does not prohibit an ordinance regulating the location or screening of solar collectors as described in subsection (a) of this section, provided the ordinance does not have the effect of preventing the reasonable use of a solar collector for a residential property.

(c) This section does not prohibit an ordinance that would prohibit the location of solar collectors as described in subsection (a) of this section that are visible by a person on the ground:

(1) On the façade of a structure that faces areas open to common or public access;

(2) On a roof surface that slopes downward toward the same areas open to common or public access that the facade of the structure faces; or

(3) Within the area set off by a line running across the facade of the structure extending to the property boundaries on either side of the facade, and those areas of common or public access faced by the structure.

(d) In any civil action arising under this section, the court may award costs and reasonable attorneys' fees to the prevailing party."

The proposed ordinance includes the appropriate language to regulate the location and screening of solar collectors to ensure that the use of solar collectors is not incongruous with the special character of the historic property or locally designated historic district.

Additional requirements, standards and restrictions concerning the installation and use of a solar collector, as determined appropriate by the Historic Preservation Commission, shall be set forth in the Historic Preservation Commission's Design Guidelines.

Prior to the use and location of a solar collector on a historic property, the land owner must first apply for and receive a Certificate of Appropriateness (COA) from the Historic Preservation Commission. Such COA shall be in addition to any required building or other permit required for improvement or construction.

Fiscal Note:

No cost to the City.

Recommendation:

In staff's opinion, this ordinance amendment is in compliance with Horizons: Greenville's Community Plan.

The Planning and Zoning Commission recommended approval of the ordinance amendment at its May 18, 2010, meeting.

If City Council determines to approve the amendment request, a motion to adopt the attached ordinance will accomplish this. The ordinance includes the statutorily required statement describing whether the action taken is consistent with the comprehensive plan and explaining why Council considers the action taken to be reasonable and in the public interest.

If City Council determines to deny the amendment request, in order to comply with this statutory requirement, it is recommended that the motion be as follows:

Motion to deny the requested text amendment and to make a finding and determination that the denial of the text amendment request is consistent with the adopted comprehensive plan and that the denial of the text amendment request is reasonable and in the public interest due to the denial being consistent with the

comprehensive plan and, as a result, the denial furthers the goals and objectives of the comprehensive plan.

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / click to download

- [Solar Collector Ordinance 861211](#)
 - [160A 201 Limitations on regulating solar collectors 861377](#)
 - [Excerpt from the May 18 2010 PandZ minutes 868359](#)
-

ORDINANCE NO. 10 - __
AN ORDINANCE AMENDING THE CITY CODE OF THE CITY OF GREENVILLE,
NORTH CAROLINA, TO AMEND THE HISTORIC PRESERVATION REGULATIONS TO
INCLUDE A NEW SECTION RELATED TO THE USE AND LOCATION OF
RESIDENTIAL SOLAR COLLECTORS ON LOCALLY DESIGNATED HISTORIC
PROPERTIES AND WITHIN LOCALLY DESIGNATED HISTORIC DISTRICTS

WHEREAS, the City Council of the City of Greenville, North Carolina, in accordance with Article 19, Chapter 160A, of the North Carolina General Statutes, caused a public notice to be given and published once a week for two successive weeks in The Daily Reflector setting forth that the City Council would, on June 10, 2010, at 7:00 p.m., in the Council Chambers of City Hall in the City of Greenville, NC, conduct a public hearing on the adoption of an ordinance amending the City Code; and

WHEREAS, in accordance with the provisions of North Carolina General Statute 160A-383, the City Council does hereby find and determine that the adoption of the ordinance involving the text amendment is consistent with the adopted comprehensive plan and that the adoption of the ordinance involving the text amendment is reasonable and in the public interest due to its consistency with the comprehensive plan and, as a result, its furtherance of the goals and objectives of the comprehensive plan.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF GREENVILLE, NORTH CAROLINA, DOES HEREBY ORDAIN:

Section 1: That Title 9, Chapter 7, of the Code of Ordinances, City of Greenville, North Carolina, is hereby amended by including a new section 9-7-18.1 to read follows:

“SEC. 9-7-18.1 SOLAR COLLECTORS

(A) Except as provided under subsection (B), the Commission shall not prohibit the installation of a solar collector that gathers solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, or generating electricity for a residential property, and no person shall be denied permission to install a solar collector that gathers solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, or generating electricity for a residential property. As used in this section, the term “residential property” means property where the predominant use is for residential purposes.

(B) No solar collector described in subsection (A) shall be allowed that is visible by a person on the ground:

- (1) On the façade of a structure that faces areas open to common or public access;
- (2) On a roof surface that slopes downward toward the same areas open to common or public access that the façade of the structure faces; or

(3) Within the area set off by a line running across the façade of the structure extending to the property boundaries on either side of the façade, and those areas of common or public access faced by the structure.

(C) Additional requirements, standards and restrictions concerning the installation and use of a solar collector shall be set forth in the “Historic Preservation Commission’s Design Guidelines.”

Section 2. All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

Section 3. Any part or provision of this ordinance found by a court of competent jurisdiction to be in violation of the Constitution or laws of the United States or North Carolina is hereby deemed severable and shall not affect the validity of the remaining provisions of the ordinance.

Section 4. This ordinance shall become effective June 10, 2010.

Patricia C. Dunn, Mayor

ATTEST:

Carol L. Barwick, City Clerk

West's North Carolina General Statutes Annotated [Currentness](#)
Chapter 160A. Cities and Towns

[Article 8](#). Delegation and Exercise of the General Police Power

➔§ 160A-201. Limitations on regulating solar collectors

(a) Except as provided in subsection (c) of this section, no city ordinance shall prohibit, or have the effect of prohibiting, the installation of a solar collector that gathers solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, or generating electricity for a residential property, and no person shall be denied permission by a city to install a solar collector that gathers solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, or generating electricity for a residential property. As used in this section, the term "residential property" means property where the predominant use is for residential purposes.

(b) This section does not prohibit an ordinance regulating the location or screening of solar collectors as described in subsection (a) of this section, provided the ordinance does not have the effect of preventing the reasonable use of a solar collector for a residential property.

(c) This section does not prohibit an ordinance that would prohibit the location of solar collectors as described in subsection (a) of this section that are visible by a person on the ground:

(1) On the façade of a structure that faces areas open to common or public access;

(2) On a roof surface that slopes downward toward the same areas open to common or public access that the façade of the structure faces; or

(3) Within the area set off by a line running across the façade of the structure extending to the property boundaries on either side of the façade, and those areas of common or public access faced by the structure.

(d) In any civil action arising under this section, the court may award costs and reasonable attorneys' fees to the prevailing party.

N.C.G.S.A. § 160A-400.4

West's North Carolina General Statutes Annotated [Currentness](#)
Chapter 160A. Cities and Towns

[Article 19](#). Planning and Regulation of Development ([Refs & Annos](#))

[Part 3C](#). Historic Districts and Landmarks

➔§ 160A-400.4. Designation of historic districts

<Text of section eff. Dec. 1, 2009. See, also, section eff. until Dec. 1, 2009.>

(a) Any municipal governing board may, as part of a zoning or other ordinance enacted or amended pursuant to this Article, designate and from time to time amend one or more historic districts within the area subject to the ordinance. Such ordinance may treat historic districts either as a separate use district classification or as districts which overlay other zoning districts. Where historic districts are designated as separate use districts, the zoning ordinance may include as uses by right or as conditional uses those uses found by the Preservation Commission to have existed during the period sought to be restored or preserved, or to be compatible with the restoration or preservation of the district.

(b) No historic district or districts shall be designated under subsection (a) of this section until:

(1) An investigation and report describing the significance of the buildings, structures, features, sites or surroundings included in any such proposed district, and a description of the boundaries of such district has been prepared, and

(2) The Department of Cultural Resources, acting through the State Historic Preservation Officer or his or her designee, shall have made an analysis of and recommendations concerning such report and description of proposed boundaries. Failure of the department to submit its written analysis and recommendations to the municipal governing board within 30 calendar days after a written request for such analysis has been received by the Department of Cultural Resources shall relieve the municipality of any responsibility for awaiting such analysis, and said board may at any time thereafter take any necessary action to adopt or amend its zoning ordinance.

(c) The municipal governing board may also, in its discretion, refer the report and proposed boundaries under subsection (b) of this section to any local preservation commission or other interested body for its recommendations prior to taking action to amend the zoning ordinance. With respect to any changes in the boundaries of such district subsequent to its initial establishment, or the creation of additional districts within the jurisdiction, the investigative studies and reports required by subdivision (1) of subsection (b) of this section shall be prepared by the preservation commission, and shall be referred to the local planning agency for its review and comment according to procedures set forth in the zoning ordinance. Changes in the boundaries of an initial district or proposal for additional districts shall also be submitted to the Department of Cultural Resources in accordance with the provisions of subdivision (2) of subsection (b) of this section.

On receipt of these reports and recommendations, the municipality may proceed in the same manner as would otherwise be required for the adoption or amendment of any appropriate zoning ordinance provisions.

(d) The provisions of [G.S. 160A-201](#) apply to zoning or other ordinances pertaining to historic districts, and the authority under [G.S. 160A-201\(b\)](#) for the ordinance to regulate the location or screening of solar collectors may encompass requiring the use of plantings or other measures to ensure that the use of solar collectors is not incongruous with the special character of the district.

Excerpt from the May 18, 2010 Planning and Zoning Commission meeting:

Text Amendment

Request by the Community Development Department to amend the Historic Preservation Regulations to include a new section related to the use and location of residential solar collectors on locally designated historic properties and within locally designated historic districts.

Mr. Laughlin said there is only one locally designated historic district, which is College View Historic District, and 21 locally designated properties. Mr. Laughlin said the North Carolina General Statutes were recently amended concerning the use and location of residential solar collectors. G.S. 160A-201 as adopted reads as follows:

"160A-201. Limitations on regulating solar collectors

(a) Except as provided in subsection (c) of this section, no city ordinance shall prohibit, or have the effect of prohibiting, the installation of a solar collector that gathers solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, or generating electricity for a residential property, and no person shall be denied permission by a city to install a solar collector that gathers solar radiation as a substitute for traditional energy for water heating, active space heating and cooling, passive heating, or generating electricity for a residential property. As used in this section, the term "residential property" means property where the predominant use is for residential purposes.

(b) This section does not prohibit an ordinance regulating the location or screening of solar collectors as described in subsection (a) of this section, provided the ordinance does not have the effect of preventing the reasonable use of a solar collector for a residential property.

(c) This section does not prohibit an ordinance that would prohibit the location of solar collectors as described in subsection (a) of this section that are visible by a person on the ground:

(1) On the façade of a structure that faces areas open to common or public access;

(2) On a roof surface that slopes downward toward the same areas open to common or public access that the façade of the structure faces; or

(3) Within the area set off by a line running across the façade of the structure extending to the property boundaries on either side of the façade, and those areas of common or public access faced by the structure.

(d) In any civil action arising under this section, the court may award costs and reasonable attorneys' fees to the prevailing party."

The proposed ordinance includes the appropriate language to regulate the location and screening of solar collectors to ensure that the use of solar collectors is not incongruous with the special character of the historic property or district.

Additional requirements, standards and restrictions concerning the installation and use of a solar collector, as determined appropriate by the Historic Preservation Commission, shall be set forth in the Historic Preservation Commission's Design Guidelines.

868359

Prior to the use and location of a solar collector on a historic property the land owner must first apply for and receive a certificate of appropriateness (COA) from the Historic Preservation Commission. Such COA shall be in addition to any required building or other permit required for improvement or construction.

In staff's opinion the request is in compliance with Horizons: Greenville's Community Plan.

Mr. Randall asked if these regulations were just following state guidelines.

Mr. Laughlin said that was correct. He said the language in the ordinance comes directly from the general statute.

Mr. Randall asked why we needed this if there was a general statute that regulated it.

Mr. Laughlin said this needed to be adopted into the Historic Preservation Ordinance so it can be enforced by the local commission.

Motion was made by Mr. Ramey, seconded by Mr. Randall, to approve the proposed text amendment, to advise that it is consistent with the comprehensive plan and other applicable plans, and to adopt the staff report which addresses plan consistency and other matters.



City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

Title of Item: Resolution to close portions of Twelfth Street and Lawrence Street

Explanation: Attached for City Council's consideration is resolution to close a portion of Twelfth Street from Charles Street to Lawrence Street and a portion of Lawrence Street from Eleventh Street to Twelfth Street. (Please refer to the attached street closing map). City Council adopted a Resolution of Intent to close these street segments during the May 10, 2010 meeting establishing a public hearing on the proposed closings to be held during the June 10, 2010 City Council meeting.

In accordance with State Statute, the Resolution of Intent was advertised in *The Daily Reflector* on four consecutive Mondays (May 17, May 24, May 31, and June 7, 2010). Signs displaying the notice of a public hearing, the adopted Resolution of Intent, and a site map were posted on May 14, 2010, at two prominent locations on the street sections to be closed. The resolution was also delivered by certified mail to adjoining property owners as listed on the Pitt County tax records (list attached).

The City received the attached petition from the Board of the Greenville Masonic Temple located at 1104 Charles Street on behalf of the Edwards Communities Development Company of Columbus, Ohio, requesting the closure and abandonment of the segments of streets. The attached proposed Street Closing Map prepared by Rivers & Associates presents the identified street segments requested to be closed.

The Edwards Communities Development Company is pursuing the development of a new student living complex in Greenville. The proposed site is located north of 14th Street, east of Charles Boulevard, south of Eleventh Street, and west of Green Mill Run. The developer has identified that it will be necessary to acquire various properties, portions of properties, and portions of street rights-of-way to facilitate the construction of this proposed development. The attached Vicinity Map identifies the parcels associated with this development. The developer is also in the process of pursuing the necessary permits for the project.

City staff has reviewed the request and based on input from all departments,

there are no objections to the closing.

The Order closing the public rights-of-way for the identified street segments of Twelfth Street and Lawrence Street shall become effective when the following condition is met:

The recordation of a final plat in accordance with the Subdivision Regulations for Greenville, North Carolina, which combines the lots, as identified with the Pitt County Register of Deeds Office, consisting of Parcels 32776, 19412, 01661, 24471, 19730, 01428, and the eastern portion of Parcel 29048, so that said lots are one lot of record.

Please refer to the attached Vicinity Map. The final plat will include dedicated utility easements for all existing utilities, as reflected on the Street Closing Map.

City staff has reviewed the "Petition to Close" these segments of streets, and based on input from all departments, there are no objections to the closing.

Fiscal Note:

Upon recordation of a final plat, the City will not be responsible for the maintenance of the identified street segments of Twelfth Street and Lawrence Street and will not receive Powell Bill (gas tax) funds for these street segments.

Recommendation:

Conduct a public hearing and consider the resolution to close a portion of Twelfth Street from Charles Street to Lawrence Street and a portion of Lawrence Street from Eleventh Street to Twelfth Street.

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / click to download

- [📄 Street Closing Petition](#)
- [📄 Street Closure Map Model Vicinity Map](#)
- [📄 Street Closing Map](#)
- [📄 Adjoining Property Owners List](#)
- [📄 Resolution to Close Portions of 12th and Lawrence Streets 868511](#)

**STATE OF NORTH CAROLINA
COUNTY OF PITT**

Prepared by: City of Greenville
Return to: City of Greenville
PO Box 7207
Greenville, NC
27834

**STREET CLOSING RESOLUTION
PORTIONS OF TWELFTH STREET AND LAWRENCE STREET**

**RESOLUTION NO. 10-_____
AN ORDER OF THE CITY COUNCIL
OF THE CITY OF GREENVILLE, NORTH CAROLINA
TO CLOSE PORTIONS OF TWELFTH STREET AND LAWRENCE STREET**

WHEREAS, the City Council of the City of Greenville, at its May 10th, 2010 meeting, adopted a resolution declaring its intent to close portions of Twelfth Street and Lawrence Street; and

WHEREAS, pursuant to the provisions of G.S. 160A-299, said resolution was published once a week for four (4) successive weeks in The Daily Reflector setting forth that a hearing will be held on the 10th day of June, 2010, on the question of the closing a portion of said streets; and

WHEREAS, a copy of the resolution was sent by certified mail to all owners of the property adjoining the portions of Twelfth Street and Lawrence Street, as shown on the County tax records, and a notice of the closing and the public hearing was prominently posted in at least two (2) places along said portions of streets; and

WHEREAS, a hearing was conducted on the 10th day of June, 2010, at which time all persons interested were afforded an opportunity to be heard on the question of whether or not the closing will be detrimental to the public interest or the property rights of any individual; and

WHEREAS, it appears to the satisfaction of the City Council of the City of Greenville, North Carolina, after conduction of said hearing, that the closing of portions of Twelfth Street and Lawrence Street is not contrary to the public interest, and that no individual owning property in the vicinity of said street or in the subdivision in which said street is located would thereby be deprived of reasonable means of ingress and egress to their property; and

IT IS NOW THEREFORE ORDERED BY THE CITY COUNCIL OF THE CITY OF GREENVILLE that, upon the effective date of this Order, the property described below be and the same is closed, and all right, title and interest that may be vested in the public to said area for street purposes is released in accordance with the provisions of G.S. 160A-299:

To Wit: The 60 foot wide right of way of a portion of the 500 block of Twelfth Street, the 50 foot wide right of way of the 1100 block of Lawrence Street, and a the 60 foot right of way of a portion of the 500 block of Charles Street as shown on the plat entitled, "Street Closing Map For A Portion Of Lawrence Street, Twelfth Street and Charles Street", prepared by Rivers and Associates, Inc. Drawing No. Z-2527, dated March 18, 2010, last revised April 21, 2010.

Location: Lying and being in the City of Greenville, Pitt County, North Carolina, south and east of Charles Street, generally bounded on the north and west by the Greenville Masonic Temple – no deed recovered and the Alpha Xi Delta Building Corporation property recorded in Deed Book C 35, Page 701; and bounded generally on the east and south by the Green Mill Run, LLC property recorded in Deed Book 1650, Page 820; the Peggy S. Corbitt, etal property recorded in Deed Book 900, Page 809; the Eric Maertz property recorded in Deed Book 2592, Page 683; the Morris Moye, Jr., etux property recorded in Deed Book 2182, Page

863; the Robert Montaquila, etux property recorded in Deed Book 596, Page 203; and the Frank Hart Trust property recorded in Deed Book 1359, Page 266 and more accurately described as follows:

Description: BEGINNING at an existing iron pipe, said pipe being located in the eastern right of way of Twelfth Street said point further being the northwest corner of the Greenville Masonic Temple property and the southwest corner of the Gamma Rho Housing Corporation recorded in Deed Book 270, Page 578, thence from said POINT OF BEGINNING and with the right of way of Twelfth Street S10°42'38" W - 208.72 feet; thence running with a sight distance triangle S 22°53'48" E - 18.07 feet to a point in the northern right of way of Twelfth Street; thence continuing with the right of way S 79°01'13" E - 297.22 feet to the intersection of the northern right of way of Twelfth Street and the western right of way of Lawrence Street; thence with the western right of way of Lawrence Street N 10°24'12" E - 224.02 feet to an existing iron pipe, the northeast corner of the Greenville Masonic Temple property, said point also being the southeast corner of the Alpha Xi Delta Building Corporation property; thence continuing with the western right of way of Lawrence Street N11°01'37" E - 146.33 feet to the intersection of the western right of way of Lawrence Street and the southern right of way of Eleventh Street, said point also being the northeast corner of the Alpha Xi Delta Building Corporation property; thence with a new line S 78°49'17" E - 50.00 feet to the intersection of the southern right of way of Eleventh Street and the eastern right of way of Lawrence Street, said point also being the northwest corner of the Peggy S. Corbitt, etal property; thence with the eastern right of way of Lawrence Street S 11°00'36" W - 144.89 feet to an existing axle, said point being the common property corner between the Peggy S. Corbitt, etal property and the Green Mill Run, LLC property; thence continuing with the eastern right of way of Lawrence Street S10°24'12" W - 359.23 feet to a point, said point being the southwest corner of the Green Mill Run, LLC property and being on the northern property line of the Cheyenne Court, Inc. property recorded in Deed Book 2656, Page 113; thence with the Cheyenne Court, Inc. property line N 79°51'59" W - 53.26 feet to a point in the western right of way of Lawrence Street, said point also being the southeast corner of the Eric Maertz property; thence with the western right of way of Lawrence Street N 10°48'29" E - 74.91 feet to the intersection with the southern right of way of Twelfth Street; thence cornering and running with the southern right of way of Twelfth Street N 79°11'31" W - 61.73 feet to a point, said point being the common corner of the Eric Maertz property and the Morris Moye, Jr., etux property; thence continuing with the southern right of way of Twelfth Street N 79°01'13"W - 123.09 feet to a point, said point being the common corner of the Robert Montaquila, etux property and the Frank Hart Trust property; thence continuing with the southern right of way of Twelfth Street N 79°07'57" W - 119.71 feet to a point, said point being the northwest corner of the Frank Hart Trust property; thence with a new line N 35°53'01" W - 69.29 feet to a point; thence continuing with a new line N 10°42'38" E - 124.00 feet to a point in the eastern right of way of Charles Street; thence with a curve in a counter-clockwise direction, having a radius of 206.39 feet, a chord bearing of N 34°42'05" E, and a distance of 122.97 feet to the POINT OF BEGINNING; containing 1.3 acres more or less, and as shown on "A Street Closing Map For A Portion Of Lawrence Street, Twelfth Street and Charles Street", prepared by Rivers & Associates Inc., Drawing No. Z-2527 dated March 18, 2010, last revised April 21, 2010.

IT IS FURTHER ORDERED BY THE CITY COUNCIL OF THE CITY OF GREENVILLE that the City of Greenville does hereby reserve its right, title, and interest in any utility improvement or easement within the street closed pursuant to this order. Such reservation also extends, in accordance with the provisions of G.S. 160A-299(f), to utility improvements or easements owned by private utilities which at the time of the street closing have a utility agreement or franchise with the City of Greenville.

IT IS FURTHER ORDERED BY THE CITY COUNCIL OF THE CITY OF GREENVILLE that this Order shall become effective when the following condition is met:

1. The recordation of a final plat in accordance with the Subdivision Regulations for Greenville, North Carolina, which combines the lots, as identified with the Pitt County Register of Deeds Office, consisting of Parcels 32776, 19412, 01661, 24471, 19730, 01428, and the eastern portion of Parcel 29048, so that said lots are one lot of record.

IT IS FURTHER ORDERED BY THE CITY COUNCIL OF THE CITY OF GREENVILLE that, upon the effective date of this Order, the Mayor and City Clerk are authorized to execute quit-claim deeds or other legal documents to prove vesting of any right, title or interest to those persons owning lots or parcels adjacent to the street in accordance with G.S. 160A-299(c), provided all costs shall be paid by any adjoining landowner requesting such action, all documents must be approved by the City Attorney and all documents, when appropriate, must reserve to the City any easements retained by the City. The intent of this paragraph is to authorize the execution of quit-claim deeds when requested by adjacent property owners; however, none are required and this paragraph is not intended to alter the vesting of title by operation of law as established by G.S. 160A-299(c).

IT IS FURTHER ORDERED BY THE CITY COUNCIL OF THE CITY OF GREENVILLE that a copy of this Order shall be filed in the Office of the Register of Deeds of Pitt County after the effective date of this Order.

Attachment number 1
Page 3 of 3

ADOPTED this the 10th day of June, 2010.

PATRICIA C. DUNN, MAYOR

ATTEST:

CAROL L. BARWICK, CITY CLERK

NORTH CAROLINA
PITT COUNTY

I, Patricia A. Sugg, a Notary Public, do hereby certify that Carol L. Barwick, City Clerk, personally appeared before me this day and acknowledged the due execution of the foregoing certification, for the purposes therein expressed.

WITNESS my hand and notarial seal this 10th day of June, 2010.

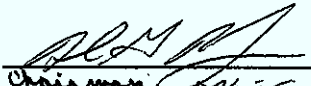

NOTARY PUBLIC

My Commission Expires: _____

PETITION FOR PROPERTY OWNERS TO CLOSE
A STREET

We the undersigned owner(s) of real property adjoining 500 block(s) of East Twelfth Street and 1100 block(s) of Lawrence Street and a portion of the Eleventh Street / Anderson Street intersection, do hereby petition the City Council of the City of Greenville, North Carolina to permanently close the street as described on Exhibit "A" attached.

Signatures of the person(s) requesting the street closing shall be as follows: Property owned by more than one individual shall be signed by all owners. Property owned by husband and wife (tenants in common) both shall sign the petition. Property owned by corporation shall be signed by president or vice president and secretary. Signatures of all remaining property owners should be listed on the attached sheet.

<u>Signature</u>	<u>Name</u>	<u>Address</u>	<u>PIN</u>
 Chairman <u>Alvis G. Roberson, Jr.</u>	Greenville Masonic Temple Board	1104 Charles Street Greenville, NC 27834	029048
 Secretary <u>Lawrence R. Garrett</u>			

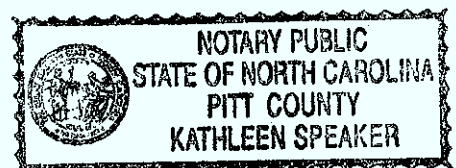
North Carolina
Pitt County

I, Kathleen Speaker, a Notary Public in and for the aforesaid County and State, do hereby certify that Lawrence R. Garrett, Secretary & Alvis G. Roberson, Jr., Chairman of the Greenville Masonic Temple Board, appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and Notarial Seal, this the 22nd day of March, 2010

MY COMMISSION EXPIRES 9-17-2011

NOTARY PUBLIC



Item # 4

Petition to Close the 500 block of East Twelfth Street
and the 1100 block of Lawrence Street
and a portion of Eleventh Street / Anderson Street

ADJACENT PROPERTY OWNER LIST


Listed below are the signatures of all property owners adjacent to the portion of the street to be closed as shown on tax records in the Pitt County Tax Supervisor's Office:

<u>Signature</u>	<u>Name</u>	<u>Address</u>	<u>PIN</u>
	Frank Hart Trust Donald Parrott, Trustee	1003 Red Banks Road Greenville, NC 27858	15608
<i>Robert T. Montaquila</i> <i>Lucy G. Montaquila</i>	Robert T. Montaquila and Lucy G. Montaquila	568 Whitehorse Drive Greenville, NC 27834	24471
	Morris Moye, Jr. and Staci Moye	PO Box 1704 Greenville, NC 27834	19730
<i>Eric Maertz</i>	Eric Maertz	510 East Twelfth Street Greenville, NC 27858	01428
	Green Mill Run, LLC	PO Box 9886 Greensboro, NC 27429	32776
	Alpha Xi Delta Building Corporation	2855 Charles Boulevard Greenville, NC 27858	00385
<i>Herbert M. Wilkerson by Christine Edwards, POA</i>	Peggy S. Corbitt and Herbert M. Wilkerson	306 Granville Drive Greenville, NC 27858	19412

Petition to Close the 500 block of East Twelfth Street
and the 1100 block of Lawrence Street
and a portion of Eleventh Street / Anderson Street

ADJACENT PROPERTY OWNER LIST

Listed below are the signatures of all property owners adjacent to the portion of the street to be closed as shown on tax records in the Pitt County Tax Supervisor's Office:

<u>Signature</u>	<u>Name</u>	<u>Address</u>	<u>PIN</u>
	Frank Hart Trust Donald Parrott, Trustee	1003 Red Banks Road Greenville, NC 27858	15608
	Robert T. Montaquila and Lucy G. Montaquila	568 Whitehorse Drive Greenville, NC 27834	24471
	Morris Moye, Jr. and Staci Moye	PO Box 1704 Greenville, NC 27834	19730
	Eric Maertz	510 East Twelfth Street Greenville, NC 27858	01428
	Green Mill Run, LLC	PO Box 9886 Greensboro, NC 27429	32776
	Alpha Xi Delta Building Corporation	2855 Charles Boulevard Greenville, NC 27858	00385
	Peggy S. Corbitt and Herbert M. Wilkerson	306 Granville Drive Greenville, NC 27858	19412

Petition to Close the 500 block of East Twelfth Street
and the 1100 block of Lawrence Street
and a portion of Eleventh Street / Anderson Street

ADJACENT PROPERTY OWNER LIST

Listed below are the signatures of all property owners adjacent to the portion of the street to be closed as shown on tax records in the Pitt County Tax Supervisor's Office:

<u>Signature</u>	<u>Name</u>	<u>Address</u>	<u>PIN</u>
	Frank Hart Trust Donald Parrott, Trustee	1003 Red Banks Road Greenville, NC 27858	15608
	Robert T. Montaquila and Lucy G. Montaquila	568 Whitehorse Drive Greenville, NC 27834	24471
	Morris Moye, Jr. and Staci Moye	PO Box 1704 Greenville, NC 27834	19730
	Eric Maertz	510 East Twelfth Street Greenville, NC 27858	01428
<i>Joseph M. Brantley</i> <i>Manager Member</i>	Green Mill Run, LLC	PO Box 9886 Greensboro, NC 27429	32776
	Alpha Xi Delta Building Corporation	2855 Charles Boulevard Greenville, NC 27858	00385
	Peggy S. Corbitt and Herbert M. Wilkerson	306 Granville Drive Greenville, NC 27858	19412

Petition to Close the 500 block of East Twelfth Street
and the 1100 block of Lawrence Street
and a portion of Eleventh Street / Anderson Street

ADJACENT PROPERTY OWNER LIST

Listed below are the signatures of all property owners adjacent to the portion of the street to be closed as shown on tax records in the Pitt County Tax Supervisor's Office:

<u>Signature</u>	<u>Name</u>	<u>Address</u>	<u>PIN</u>
	Frank Hart Trust Donald Parrott, Trustee	1003 Red Banks Road Greenville, NC 27858	15608
	Robert T. Montaquila and Lucy G. Montaquila	568 Whitehorse Drive Greenville, NC 27834	24471
	Morris Moye, Jr. and Staci Moye	PO Box 1704 Greenville, NC 27834	19730
	Eric Maertz	510 East Twelfth Street Greenville, NC 27858	01428
	Green Mill Run, LLC	PO Box 9886 Greensboro, NC 27429	32776
<i>Anna M. Weaver</i>	Alpha Xi Delta Building Corporation	2855 Charles Boulevard Greenville, NC 27858	00385
	Peggy S. Corbitt and Herbert M. Wilkerson	306 Granville Drive Greenville, NC 27858	19412

EXHIBIT "A"

To Wit: The 60 foot wide right of way of a portion of the 500 block of Twelfth Street, the 50 foot wide right of way of the 1100 block of Lawrence Street, and a portion of the right of way at the intersection of Eleventh Street and Anderson Street as shown on the plat entitled, "Street Closing Map For Edwards Communities Development Company", prepared by Rivers and Associates, Inc. Drawing No. Z-2527, dated February 26, 2010.

Location: Lying and being in the City of Greenville, Pitt County, North Carolina, south and east of Charles Street, generally bounded on the north and west by the Greenville Masonic Temple – no deed recovered and the Alpha Xi Delta Building Corporation property recorded Deed Book C 35, Page 701; and bounded generally on the east and south by the Green Mill Run, LLC property recorded in Deed Book 1650, Page 820; the Peggy S. Corbitt etal property recorded in Deed Book 900, Page 809; the Eric Maertz property recorded in Deed Book 2592, Page 683; the Morris Moye, Jr. etux property recorded in Deed Book 2182, Page 863; the Robert Montaquila etux property recorded in Deed Book 596, Page 203; and the Frank Hart Trust property recorded in Deed Book 1359, Page 266 and more accurately described as follows:

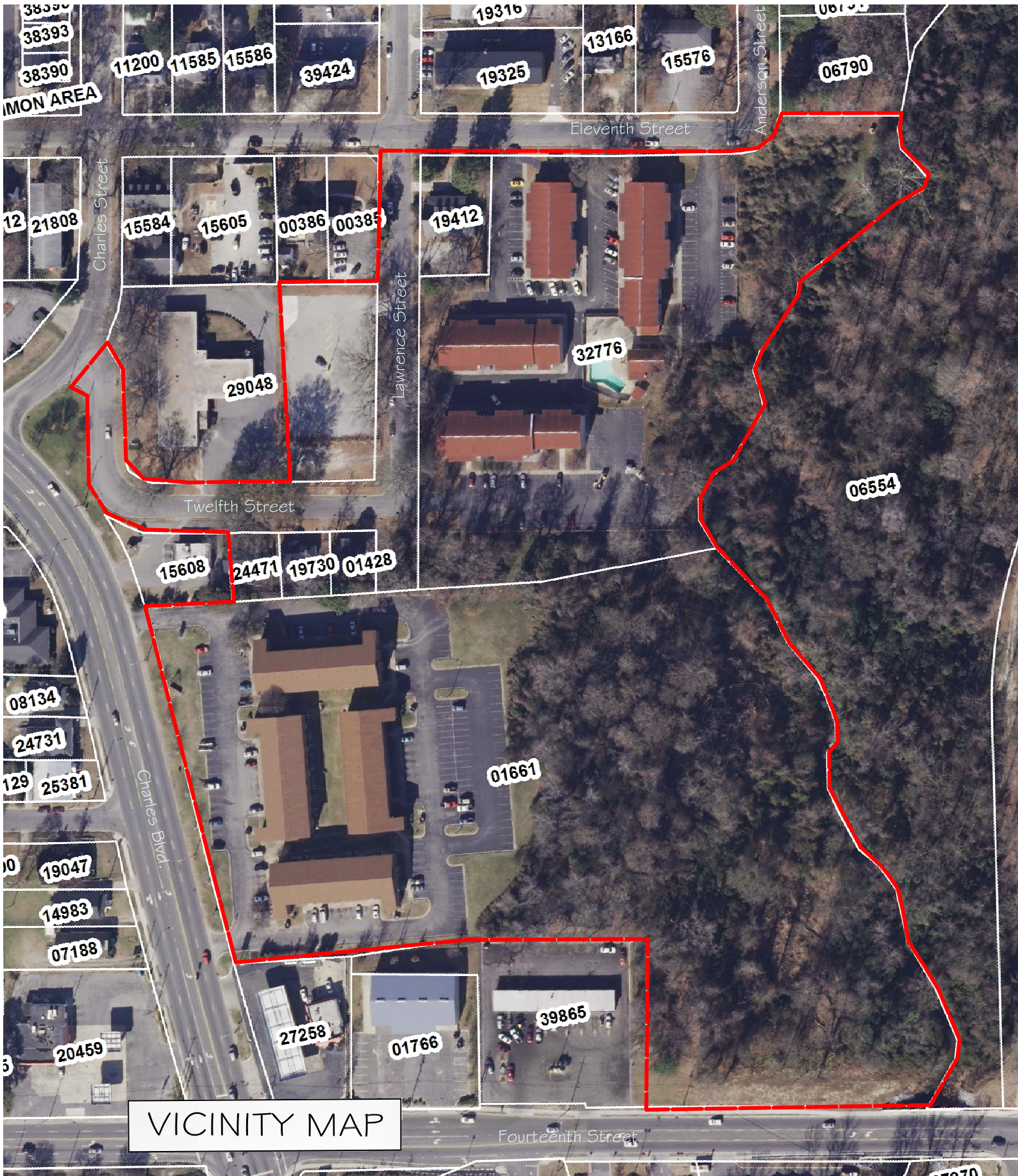
Tract 1

BEGINNING at a set iron pipe, said pipe being located in the eastern right of way of Twelfth Street said point further being the northwest corner of the Greenville Masonic Temple property and the southwest corner of the Gamma Rho Housing Corporation recorded in Deed Book 270 Page 578, thence from said POINT OF BEGINNING and with the right of way of Twelfth Street S 10°42'38" W 208.72 feet; thence running with a sight distance triangle S 34°09'17" E 21.26 feet to a point in the northern right of way Twelfth Street; thence continuing with the right of way S 79°01'13" E 292.22 feet to the intersection of the northern right of way of Twelfth Street and the western right of way of Lawrence Street; thence with the western right of way of Lawrence Street N 10°24'12" E 224.02 feet to the northeast corner of the Greenville Masonic Temple property, said point also being the southeast corner of the Alpha Xi Delta Building Corporation property; thence continuing with the western right of way of Lawrence Street N 11°01'37" E 146.18 feet to the intersection of the western right of way of Lawrence Street and the southern right of way of Eleventh Street, said point also being the northeast corner of the Alpha Xi Delta Building Corporation property; thence with a new line S 78°59'24" E 50.00 feet to the intersection of the southern right of way of Eleventh Street and the eastern right of way of Lawrence Street, said point also being the northwest corner of the Peggy S. Corbitt etal property; thence with the eastern right of way of Lawrence Street S 11°00'36" W 144.89 feet to an existing axle, said point being the common property corner between the Peggy S. Corbitt etal property and the Green Mill Run, LLC property; thence continuing with the eastern right of way of Lawrence Street S 10°24'12" W 359.25 feet to an existing iron pipe, said point being the southwest corner of the Green Mill Run, LLC property and being on the northern property line of the Cheyenne Court, Inc. property recorded in Deed Book 2656, Page

113; thence with the Cheyenne Court, Inc. property line N 79°51'59" W 53.26 feet to a point in the western right of way of Lawrence Street, said point also being the southeast corner of the Eric Maertz property; thence with the western right of way of Lawrence Street N 10°48'29" E 74.91 feet to the intersection with the southern right of way of Twelfth Street; thence cornering and running with the southern right of way of Twelfth Street N 79°11'31" W 61.73 feet to a point, said point being the common corner of the Eric Maertz property and the Morris Moye, Jr. etux property; thence continuing with the southern right of way of Twelfth Street N 79°01'13" W 123.09 feet to a point, said point being the common corner of the Robert Montaquila etux property and the Frank Hart Trust property; thence continuing with the southern right of way of Twelfth Street N 79°07'57" W 119.71 feet to a point, said point being northwest corner of the Frank Hart Trust property; thence with a new line N 35°53'01" W 69.29 feet to a point; thence continuing with a new line N 10°42'38" E 124.00 feet to a point in the eastern right of way of Charles Street; thence with a curve in a counter-clockwise direction, having a radius of 206.39 feet, a chord bearing of N 34°42'05" E, and a distance of 122.97 feet to the POINT OF BEGINNING; containing 1.227 acres more or less, and as shown on "A Street Closing Map For Edwards Communities Development Company", prepared by Rivers & Associates Inc., Drawing No. Z-2527 dated February 26, 2010.

Tract 2

BEGINNING at an existing iron pipe, said pipe being located in at the intersection of the eastern right of way of Anderson Street and the southern right of way of Eleventh Street, thence from said POINT OF BEGINNING and with the right of way of Eleventh Street N 78°57'04" E 72.29 feet; thence leaving the right of way of Eleventh Street and with a new curve in a counter-clockwise direction, having a radius of 70.91 feet, a chord bearing of N 56°02'56" E, and a chord distance of 100.28 feet to point in the eastern right of way of Anderson Street, said point also being the southwest corner of the Raymond W. Edwards property recorded in Deed Book H 46 Page 397; thence with the eastern right of way of Anderson Street S 09°56'13" W 70.92 feet to the POINT OF BEGINNING; containing 0.026 acres more or less, and as shown on "A Street Closing Map For Edwards Communities Development Company", prepared by Rivers & Associates Inc., Drawing No. Z-2527 dated February 26, 2010.



LEGEND

- TP ○ TELEPHONE PEDESTAL
- ☆ LIGHT POLE
- ⊙ SANITARY SEWER MANHOLE
- WM ○ WATER METER
- WV ⊞ WATER VALVE
- WMV ⊞ WATER METER VAULT
- ⊞ CATCH BASIN
- ⊞ STORM DRAINAGE MANHOLE
- ⊞ SIGN
- SD SATELLITE DISH
- ⊙ MW MONITORING WELL
- UTILITY POLE
- LIGHT POLE / UTILITY POLE
- ⊙ EXISTING LOT NUMBER
- ⊙ EXISTING BLOCK NUMBER
- W — WATER LINE
- UGE — UNDERGROUND ELECTRIC
- OHE — OVERHEAD ELECTRIC
- ==== STORM DRAINAGE LINES
- S — SANITARY SEWER MAIN
- OHT — OVERHEAD TELEPHONE
- G — UNDER GROUND GAS/SERVICE

- ASPHALT
- CONCRETE
- GRAVEL

- F.P. FLAG POLE
- E.I.P. EXISTING IRON PIPE
- I.P.S. IRON PIPE SET
- N.P.S. NO PIPE SET
- N/F. NOW OR FORMERLY
- P.N. PARCEL NUMBER
- M.B. MAP BOOK
- P.G. PAGE
- D.B. DEED BOOK
- CLF. CHAIN LINK FENCE
- EX. EXISTING
- E. AXLE. EXISTING AXLE
- R/W. RIGHT OF WAY
- B/B. BACK TO BACK
- AKA. ALSO KNOWN AS
- CO. CLEAN OUT
- CONC. CONC.
- C.P. CONCRETE PIPE
- FH. FIRE HYDRANT
- T. ELECTRIC TRANSFORMER
- ESB. ELECTRIC SERVICE BOX
- D.P. DUMPSTER PAD
- W.P. WOOD POST

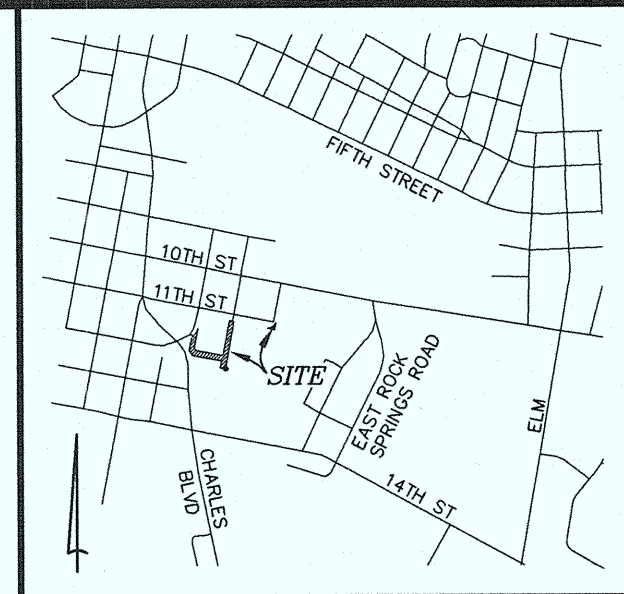
- 50' INGRESS/EGRESS & GENERAL UTILITY EASEMENT
- 30' SANITARY SEWER EASEMENT
- GENERAL UTILITY EASEMENT

REFERENCES

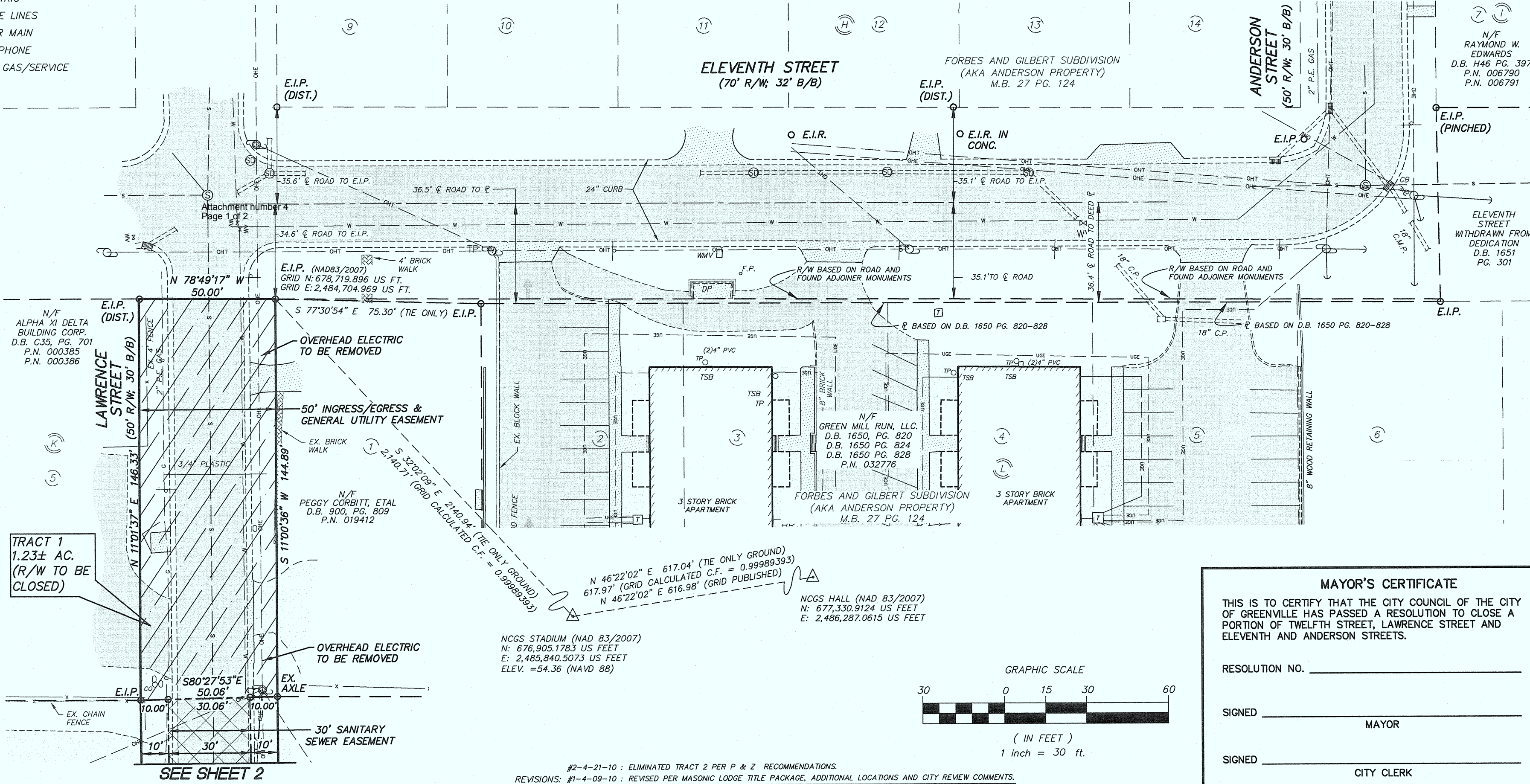
- D.B. 2656 PG. 113
- D.B. 1711 PG. 465
- D.B. 1650 PG. 820
- D.B. 1650 PG. 824
- D.B. 1650 PG. 828
- D.B. H46 PG. 397
- D.B. 2592 PG. 683
- D.B. 2182 PG. 863
- D.B. 596 PG. 203
- M.B. 31 PG. 90
- M.B. 27 PG. 124A
- D.B. V 32 PG. 516
- D.B. 615 PG. 254
- D.B. D 33 PG. 662
- D.B. Y 33 PG. 258
- D.B. Y 33 PG. 245
- M.B. 10 PG. 130
- STATE HIGHWAY BOOK 1 PAGE 17
- STATE HIGHWAY BOOK 2 PAGE 22-B
- RIVERS & ASSOCIATES DRAWING W-950-A
- RIVERS & ASSOCIATES DRAWING E-287-B

NOTES:

1. ALL DISTANCES ARE HORIZONTAL GROUND MEASUREMENTS, IN FEET.
2. AREA DETERMINED BY COORDINATES.
3. PROPERTY SUBJECT TO ANY EASEMENTS, RESTRICTIVE COVENANTS, OR RIGHTS OF WAY WHICH MAY BE OF RECORD. THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT REPORT OR RESEARCH.
4. PORTIONS OF THIS PROPERTY ARE LOCATED IN A ZONE "AE" (AREA DETERMINED TO BE INSIDE THE 1% ANNUAL CHANCE FLOOD (100-YEAR FLOOD), ZONE "X" SHADED (AREA OF 0.2% ANNUAL CHANCE FLOOD; AREA OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT), ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOOD) AS SHOWN ON THE FEMA FLOOD INSURANCE RATE MAP NUMBER 3720468700J, PANEL 4687 J, EFFECTIVE JANUARY 2, 2004. FLOOD CROSS SECTION ELEVATIONS ARE NAVD 88.
5. THE LOCATION OF THE PROPERTY LINES ALONG CENTERLINES OF CREEKS OR STREAMS ARE SUBJECT TO CHANGE DUE TO NATURAL RIPARIAN CAUSES. (SURVEY LINES ARE FOR REFERENCE ONLY.) NO POINTS SET IN THE CENTERLINE OF GREEN MILL RUN.
6. THE SURVEYOR MAKES NO GUARANTEE THAT THE UTILITIES SHOWN ARE COMPRISED OF ALL SUCH UTILITIES IN THE AREA OF SURVEY EITHER IN SERVICE OR ABANDONED. THE SURVEY FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE SURVEYOR DOES HEREBY CERTIFY THAT ALL UTILITIES ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY UNCOVERED AND LOCATED ANY UNDERGROUND UTILITIES).
7. THE DESIGNATION NOTED OVER WATER, SANITARY SEWER, GAS, OR ELECTRIC LINES ARE FOR THE PURPOSE OF ESTABLISHING WIDTH OF SAID EASEMENTS. THE EASEMENTS SHOWN ARE NOT EXCLUSIVE AND WILL PERMIT THE FUTURE INSTALLATION OF WATER, SANITARY SEWER, GAS AND ELECTRIC LINES WITHIN THOSE DESIGNATED WIDTHS.
8. NO BUILDINGS, STRUCTURES, OR OTHER IMPROVEMENTS, MATERIALS, AND SURFACES, INCLUDING BUT NOT LIMITED TO PRINCIPAL AND ACCESSORY STRUCTURES AND ADDITIONS OR APPURTENANCES THERETO, SIGNAGE, FENCES, WALLS, MECHANICAL EQUIPMENT, CANOPIES, ANTENNAS, MASTS, AERIALS, MONUMENTS, LANDSCAPE PLANTINGS, FILL MATERIALS, DEBRIS, SOLID WASTE COLLECTION CONTAINERS, MAIL RECEPTACLES, AND IMPERVIOUS SURFACES, SHALL ENCROACH WITHIN ANY DEDICATED EASEMENT WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY OF GREENVILLE.



Vicinity Map
SCALE: 1" = 2000'



MAYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT THE CITY COUNCIL OF THE CITY OF GREENVILLE HAS PASSED A RESOLUTION TO CLOSE A PORTION OF TWELFTH STREET, LAWRENCE STREET AND ELEVENTH AND ANDERSON STREETS.

RESOLUTION NO. _____

SIGNED _____ MAYOR

SIGNED _____ CITY CLERK

STATE OF NORTH CAROLINA
COUNTY OF PITT

I, _____
A REVIEW OFFICER OF PITT COUNTY, CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING.

REVIEW OFFICER _____
DATE _____

SOURCE OF TITLE

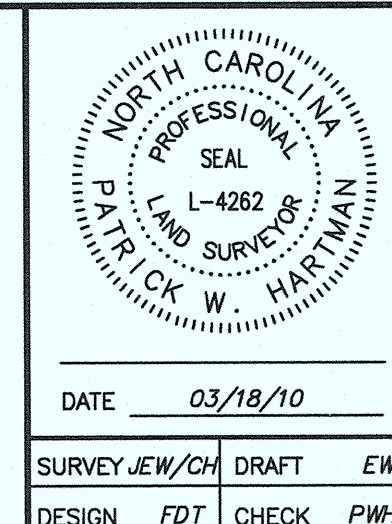
THIS IS TO CERTIFY THAT THE LAST INSTRUMENT(S) IN THE CHAIN OF TITLE OF THIS PROPERTY AS RECORDED IN THE PITT COUNTY REGISTRY AT GREENVILLE, NORTH CAROLINA IS: (AS NOTED ABOVE)

PROFESSIONAL LAND SURVEYOR
REGISTRATION NO. L-4262

NORTH CAROLINA, PITT COUNTY

I, PATRICK W. HARTMAN, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE BY CHAD HOLLAND AND JAMES E. WHITE FROM 12/23/09 - 1/12/10 ; THAT THE RATIO OF PRECISION IS 1:10,000+; THAT BOUNDARIES NOT SURVEYED ARE SHOWN AS BROKEN LINES PLOTTED FROM INFORMATION FOUND IN BOOKS REFERENCED HEREON; THAT THIS MAP WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED. I FURTHER CERTIFY PURSUANT TO G.S. 47-30 (f) (11) THAT THIS SURVEY IS OF ANOTHER CATEGORY, BEING A SURVEY FOR A STREET CLOSING. WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS 18TH DAY OF MARCH, 2010.

PROFESSIONAL LAND SURVEYOR
REGISTRATION NUMBER L-4262



Rivers & Associates, Inc.
107 East Second Street
Greenville, NC 27658 (252) 752-4135

6131 Falls of Neuse Road, Suite 300
Raleigh, NC 27609 (919) 849-3347

STREET CLOSING MAP FOR
A PORTION OF LAWRENCE STREET, TWELFTH STREET AND CHARLES STREET

CITY OF GREENVILLE, GREENVILLE TOWNSHIP, PITT CO., N.C.

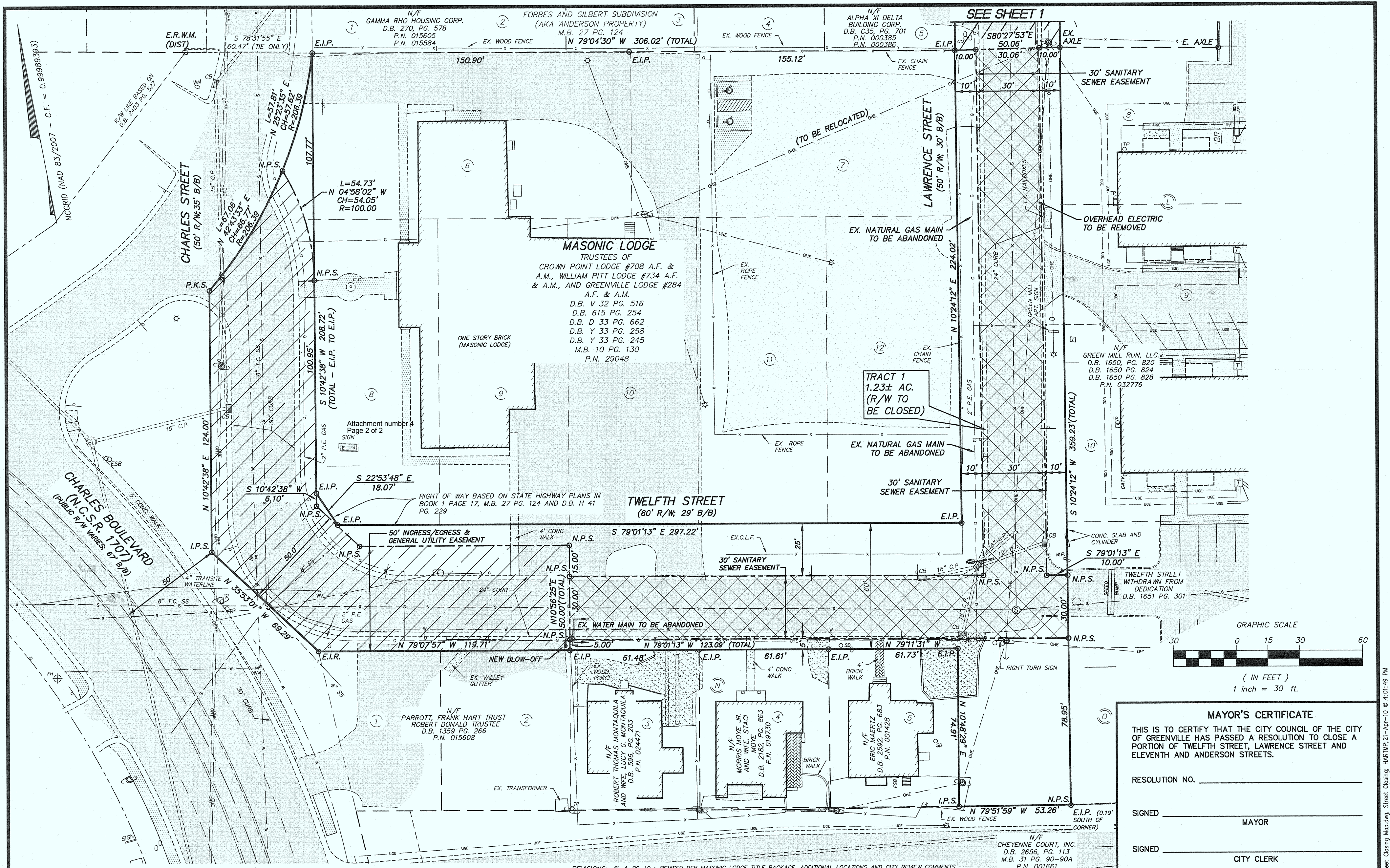
DATE 03/18/10

SURVEY/JEW/CH DRAFT EW
DESIGN FDT CHECK PWH

SCALE 1" = 30'

DRAWING NO. Z-2527

SHEET 1 OF 2



MAYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT THE CITY COUNCIL OF THE CITY OF GREENVILLE HAS PASSED A RESOLUTION TO CLOSE A PORTION OF TWELFTH STREET, LAWRENCE STREET AND ELEVENTH AND ANDERSON STREETS.

RESOLUTION NO. _____

SIGNED _____ MAYOR

SIGNED _____ CITY CLERK

REVISIONS: #1-4-09-10 : REVISED PER MASONIC LODGE TITLE PACKAGE, ADDITIONAL LOCATIONS AND CITY REVIEW COMMENTS.

LEGEND
SEE SHEET 1

REFERENCES
SEE SHEET 1

NOTES
SEE SHEET 1

STATE OF NORTH CAROLINA
COUNTY OF PITT

I, _____
A REVIEW OFFICER OF PITT COUNTY, CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING.

REVIEW OFFICER _____
DATE _____

SOURCE OF TITLE

THIS IS TO CERTIFY THAT THE LAST INSTRUMENT(S) IN THE CHAIN OF TITLE OF THIS PROPERTY AS RECORDED IN THE PITT COUNTY REGISTRY AT GREENVILLE, NORTH CAROLINA IS: (AS NOTED ABOVE)

PROFESSIONAL LAND SURVEYOR _____
REGISTRATION NO. L-4262

NORTH CAROLINA, PITT COUNTY

I, PATRICK W. HARTMAN, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE BY CHAD HOLLAND AND JAMES E. WHITE FROM 12/23/09 - 1/12/10 ; THAT THE RATIO OF PRECISION IS 1:10,000+; THAT BOUNDARIES NOT SURVEYED ARE SHOWN AS BROKEN LINES PLOTTED FROM INFORMATION FOUND IN BOOKS REFERENCED HEREON; THAT THIS MAP WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED. I FURTHER CERTIFY PURSUANT TO G.S. 47-30 (f) (11) THAT THIS SURVEY IS OF ANOTHER CATEGORY, BEING A SURVEY FOR A STREET CLOSING. WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER AND SEAL THIS 18TH DAY OF MARCH, 2010.

PROFESSIONAL LAND SURVEYOR *Patrick W. Hartman*
REGISTRATION NUMBER L-4262

NORTH CAROLINA
PROFESSIONAL
SEAL
L-4262
LAND SURVEYOR
PATRICK W. HARTMAN

DATE 03/18/10

SURVEY/JEW/CH DRAFT EW
DESIGN FDT CHECK PWH

Rivers
& Associates, Inc.
Since 1918
107 East Second Street
Greenville, NC 27658 (252) 752-4135

6131 Falls of Neuse Road, Suite 300
Raleigh, NC 27609 (919) 848-3347

STREET CLOSING MAP FOR
A PORTION OF LAWRENCE STREET, TWELFTH STREET AND CHARLES STREET

CITY OF GREENVILLE, GREENVILLE TOWNSHIP, PITT CO., N.C.

SCALE 1" = 30'
DRAWING NO. Z-2527
SHEET 2 OF 2

N:\Ewards - Kings Arms - Green Mill Run - NC Grid\Map\Street Closing Map.dwg, Street Closing, HARTMAN-21-Apr-10 @ 4:01:49 PM

Adjoining property owners along Twelfth Street and Lawrence Street

PIN 000385

Property Address: E. Eleventh Street

Alpha XI Delta Building Corp.
2855 Charles Blvd.
Greenville, NC 27858

PIN 001428

Property Address: 510 E. Twelfth Street

Eric Maertz
510 E. Twelfth Street
Greenville, NC 27858

PIN 001661

Property Address: 606 E. Eleventh St.

Cheyenne Court, Inc
Attn: Paul Kratzer
8 Greenway Plaza, Suite 1100
Houston, TX 77046

PIN 015608

Property Address: 1201 Charles Blvd.

Mr. Robert Donald Parrott, Trustee
1003 Red Banks Road
Greenville, NC 27858

PIN 019412

Property Address: 600 E. Eleventh St.

Herbert M. Wilkerson, etal
306 Granville Drive
Greenville, NC 27858

PIN 019730

Property Address: 508 E. Twelfth Street

Morris Moye, Jr.
Staci Moye
PO Box 1704
Greenville, NC 27834

PIN 024471

Property Address: 504 E. Twelfth Street

Robert Thomas Montaquila
568 Whitehorse Dr.
PO Box 1574
Greenville, NC 27834

PIN 029048

Property Address: 1104 Charles Street

Masonic Lodge
1104 Charles Street
Greenville, NC 27834

PIN 032776

Property Address: 606 E. Eleventh St.

Green Mill Run, LLC
Attn: Joseph M. Brantley
PO Box 9886
Greensboro, NC 27429



City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

Title of Item: Ordinance requiring the repair or the demolition and removal of the dwelling located at 1224 Davenport Street

Explanation: The Code Enforcement Officer for the City of Greenville is requesting that the City Council approve an ordinance requiring the owner of a dwelling which has been vacated and closed for a period of at least six months pursuant to the enforcement of the Minimum Housing Code to repair or demolish and remove the dwelling located at 1224 Davenport Street. The ordinance provides that the owner has 90 days to repair or demolish and remove the dwelling and if the owner fails to accomplish this within 90 days, then the City will proceed with repairing or demolishing and removing the dwelling.

The initial notice of violation was sent by certified mail on April 20, 2009, to the property owner informing the owner of the condition of the abandoned structure and minimum housing violations cited by the Code Enforcement Officer and of the remedies necessary to bring the structure into compliance. Staff has attempted to work with the owner, but no repairs have been made. The most recent notice to the owner was sent on May 11, 2010 and provided notice to the owner that the dwelling was considered as an abandoned structure.

The dwelling has been vacated and closed for a period of at least six months. The utilities to the dwelling have been disconnected since July 22, 2008.

There have been 17 Code Enforcement cases initiated on this property since 1998, ranging from public nuisance to minimum housing and abandoned structure. The Police Department has responded to 52 calls for service at this property since January 2000. Calls include animal complaints, suicide, trespass, disturbances, assault, dispute, violations of the NC Controlled Substance Act, and shots fired.

The tax value on the property as of May 12, 2010, was \$21,530 (the building value is \$18,730 and the land value is \$2,800).

The estimated costs to repair the property are \$16,728.45.

Fiscal Note:

Costs to test and abate asbestos (if present) and demolition costs will be approximately \$10,000 due to the size of the structure.

The cost of repair or demolition and removal shall constitute a lien against the real property upon which the cost was incurred. The lien shall be filed, have the same priority, and be collected in the same manner as the lien for special assessment established by Article 10 of Chapter 160A of the North Carolina General Statutes.

Recommendation:

Approval of the ordinance requiring the repair or demolition and removal of the dwelling located at 1224 Davenport Street.

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / click to download

 [photo description of property](#)

 [Ordinance_for_Repair_or_Demolition_1224_Davenport_Street_868072](#)

ORDINANCE NO. 10-_____
ORDINANCE REQUIRING THE OWNER OF A DWELLING VACATED
AND CLOSED FOR A PERIOD OF AT LEAST SIX MONTHS PURSUANT TO THE
ENFORCEMENT OF THE MINIMUM HOUSING CODE TO REPAIR OR DEMOLISH
AND REMOVE THE DWELLING LOCATED AT 1224 DAVENPORT STREET
TAX PARCEL NUMBER 004357

WHEREAS, pursuant to the enforcement of the Minimum Housing Code contained in Article F of Chapter 1 of Title 9 of the Code of the City of Greenville, North Carolina, as authorized by the provisions of Part 6 of Article 19 of Chapter 160A of the North Carolina General Statutes, the dwelling described herein has been vacated and closed for a period of at least six (6) months;

WHEREAS, the City Council of the City of Greenville hereby finds that the owner has abandoned the intent and purpose to repair, alter or improve the dwelling described herein in order to render it fit for human habitation and the continuation of the dwelling in its vacated and closed state would be inimical to the health, safety, morals and welfare of the city in that the dwelling would continue to deteriorate, would create a fire and safety hazard, would be a threat to children and vagrants, would attract persons intent on criminal activities, would cause or contribute to blight and the deterioration of property values in the area, and would render unavailable property and a dwelling which might otherwise have been made available to ease the persistent shortage of decent and affordable housing in this State; and

WHEREAS, G.S. 160A-443 (5), which applies to the City of Greenville pursuant to the provisions of Chapter 200 of the 2005 Session Laws of the North Carolina General Assembly, and Section 9-1-111 of the Code of the City of Greenville, North Carolina, empowers the City Council of the City of Greenville to enact this ordinance;

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Greenville that:

Section 1. The owner(s), Arthur R. Reynolds, of the dwelling located at 1224 Davenport Street, in the City of Greenville, North Carolina, is hereby directed and required to either repair said dwelling so that it fully complies with the standards of the Minimum Housing Code or to demolish and remove said dwelling within ninety (90) days from the effective date of this ordinance.

Section 2. No building or repair permits shall be issued to the owner or representative of the owner without prior approval of the Code Enforcement Officer. Failure to comply with any approval of the Code Enforcement Officer shall result in recession of any building permit.

Section 3. The Code Enforcement Officer is hereby authorized and directed to proceed to either repair or demolish and remove the dwelling in the event the owner fails to comply with the provisions of Section 1 of this ordinance within ninety (90) days, or fails to comply with any approval by the Code Enforcement Officer in Section 2, said dwelling being located at 1224 Davenport Street and owned by Arthur R. Reynolds.

Section 4. The cost of repair or demolition and removal shall constitute a lien against the real property upon which the cost was incurred. The lien shall be filed, have the same priority, and be collected in the same manner as the lien for special assessment established by Article 10 of Chapter 160A of the North Carolina General Statutes. The material of the dwelling and any personal property, fixtures, or appurtenances found in or attached to the dwelling shall be sold and the proceeds shall be credited against the cost of removal or

demolition and any balance remaining shall be deposited in superior court where it shall be secured and disbursed in the manner provided by G.S. 160A-443 (6).

Section 5. This ordinance shall be recorded in the Office of the Register of Deeds of Pitt County and shall be indexed in the name of the property owner in the grantor index.

Section 6. This ordinance shall become effective upon its adoption.

This the 10th day of June, 2010.

Patricia C. Dunn, Mayor

ATTEST:

Carol L. Barwick, City Clerk



Item # 5



Item # 5





City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

Title of Item: Ordinance requiring the repair or the demolition and removal of the dwelling located at 1117 Douglas Avenue

Explanation: The Code Enforcement Officer for the City of Greenville is requesting that the City Council approve an ordinance requiring the owner of a dwelling which has been vacated and closed for a period of at least six months pursuant to the enforcement of the Minimum Housing Code to repair or demolish and remove the dwelling located at 1117 Douglas Avenue. The ordinance provides that the owner has 90 days to repair or demolish and remove the dwelling and if the owner fails to accomplish this within 90 days, then the City will proceed with repairing or demolishing and removing the dwelling.

The initial notice of violation was sent by certified mail on January 16, 2009, to the property owner informing the owner of the condition of the abandoned structure and minimum housing violations cited by the Code Enforcement Officer and of the remedies necessary to bring the structure into compliance.

Staff has attempted to work with the owner, but no repairs have been made. The most recent notice to the owner was sent on May 11, 2010, and provided notice to the owner that the dwelling was considered an abandoned structure.

The dwelling has been vacated and closed for a period of at least six months. The utilities to the dwelling have been disconnected since April 2002.

There have been 17 Code Enforcement cases initiated on this property since 1998 ranging from public nuisance to minimum housing and abandoned structure. The Police Department has responded to 14 calls for service at this property since January 2000. Calls include request officer, assault, larceny, and communicating threats.

The tax value on the property as of May 12, 2010, was \$17,208 (the building value is \$14,663 and the land value is \$2,545).

The estimated costs to repair the property are \$23,385.

Fiscal Note:

Costs to test and abate asbestos (if present) and demolition costs will be approximately \$10,000 due to the size of the structure.

The cost of repair or demolition and removal shall constitute a lien against the real property upon which the cost was incurred. The lien shall be filed, have the same priority, and be collected in the same manner as the lien for special assessment established by Article 10 of Chapter 160A of the North Carolina General Statutes.

Recommendation:

Approval of the ordinance requiring the repair or demolition and removal of the dwelling located at 1117 Douglas Avenue.

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / click to download

[Photo Description of Property](#)

[ordinance_for_Repair_or_Demolition_1117_Douglas_Avenue_867170](#)

ORDINANCE NO. 10-_____
ORDINANCE REQUIRING THE OWNER OF A DWELLING VACATED
AND CLOSED FOR A PERIOD OF AT LEAST SIX MONTHS PURSUANT TO THE
ENFORCEMENT OF THE MINIMUM HOUSING CODE TO REPAIR OR DEMOLISH
AND REMOVE THE DWELLING LOCATED AT 1117 DOUGLAS AVENUE
TAX PARCEL NUMBER 013285

WHEREAS, pursuant to the enforcement of the Minimum Housing Code contained in Article F of Chapter 1 of Title 9 of the Code of the City of Greenville, North Carolina, as authorized by the provisions of Part 6 of Article 19 of Chapter 160A of the North Carolina General Statutes, the dwelling described herein has been vacated and closed for a period of at least six (6) months;

WHEREAS, the City Council of the City of Greenville hereby finds that the owner has abandoned the intent and purpose to repair, alter or improve the dwelling described herein in order to render it fit for human habitation and the continuation of the dwelling in its vacated and closed state would be inimical to the health, safety, morals and welfare of the city in that the dwelling would continue to deteriorate, would create a fire and safety hazard, would be a threat to children and vagrants, would attract persons intent on criminal activities, would cause or contribute to blight and the deterioration of property values in the area, and would render unavailable property and a dwelling which might otherwise have been made available to ease the persistent shortage of decent and affordable housing in this State; and

WHEREAS, G.S. 160A-443 (5), which applies to the City of Greenville pursuant to the provisions of Chapter 200 of the 2005 Session Laws of the North Carolina General Assembly, and Section 9-1-111 of the Code of the City of Greenville, North Carolina, empowers the City Council of the City of Greenville to enact this ordinance;

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Greenville that:

Section 1. The owner(s), SML Mortgage Corporation, of the dwelling located at 1117 Douglas Avenue, in the City of Greenville, North Carolina, is hereby directed and required to either repair said dwelling so that it fully complies with the standards of the Minimum Housing Code or to demolish and remove said dwelling within ninety (90) days from the effective date of this ordinance.

Section 2. No building or repair permits shall be issued to the owner or representative of the owner without prior approval of the Code Enforcement Officer. Failure to comply with any approval of the Code Enforcement Officer shall result in recession of any building permit.

Section 3. The Code Enforcement Officer is hereby authorized and directed to proceed to either repair or demolish and remove the dwelling in the event the owner fails to comply with the provisions of Section 1 of this ordinance within ninety (90) days, or fails to comply with any approval by the Code Enforcement Officer in Section 2, said dwelling being located at 1117 Douglas Avenue and owned by SML Mortgage Corporation.

Section 4. The cost of repair or demolition and removal shall constitute a lien against the real property upon which the cost was incurred. The lien shall be filed, have the same priority, and be collected in the same manner as the lien for special assessment established by Article 10 of Chapter 160A of the North Carolina General Statutes. The material of the dwelling and any personal property, fixtures, or appurtenances found in or attached to the dwelling shall be sold and the proceeds shall be credited against the cost of removal or

demolition and any balance remaining shall be deposited in superior court where it shall be secured and disbursed in the manner provided by G.S. 160A-443 (6).

Section 5. This ordinance shall be recorded in the Office of the Register of Deeds of Pitt County and shall be indexed in the name of the property owner in the grantor index.

Section 6. This ordinance shall become effective upon its adoption.

This the 10th day of June, 2010.

Patricia C. Dunn, Mayor

ATTEST:

Carol L. Barwick, City Clerk



Item # 6



Item # 6



Item # 6



City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

Title of Item: Ordinance requiring the repair or the demolition and removal of the dwelling located at 212 Manhattan Avenue

Explanation: The Code Enforcement Officer for the City of Greenville is requesting that the City Council approve an ordinance requiring the owner of a dwelling which has been vacated and closed for a period of at least six months pursuant to the enforcement of the Minimum Housing Code to repair or demolish and remove the dwelling located at 212 Manhattan Avenue. The ordinance provides that the owner has 90 days to repair or demolish and remove the dwelling and if the owner fails to accomplish this within 90 days, then the City will proceed with repairing or demolishing and removing the dwelling.

The initial notice of violation was sent by certified mail on March 30, 2009, to the property owner informing the owner of the condition of the abandoned structure and minimum housing violations cited by the Code Enforcement Officer and of the remedies necessary to bring the structure into compliance.

Staff has attempted to work with the owner, but no repairs have been made. The most recent notice to the owner was sent on May 11, 2010, and provided notice to the owner that the dwelling was considered an abandoned structure.

The dwelling has been vacated and closed for a period of at least six months. The utilities to the dwelling have been disconnected since March 31, 2009.

There have been five Code Enforcement cases initiated on this property since 1998, ranging from public nuisance to minimum housing. The Police Department has responded to 44 calls for service at this property since January 2000. Calls include domestics, armed subjects, multiple assaults, multiple fights, and shots fired.

The tax value on the property as of May 12, 2010, was \$23,848 (the building value is \$20,598 and the land value is \$3,250).

The estimated costs to repair the property are \$23,671.30.

Fiscal Note:

Costs to test and abate asbestos (if present) and demolition costs will be approximately \$5,000 due to the size of the structure.

The cost of repair or demolition and removal shall constitute a lien against the real property upon which the cost was incurred. The lien shall be filed, have the same priority, and be collected in the same manner as the lien for special assessment established by Article 10 of Chapter 160A of the North Carolina General Statutes.

Recommendation:

Approval of the ordinance requiring the repair or demolition and removal of the dwelling located at 212 Manhattan Avenue.

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / click to download

 [Photo Description of Property](#)

 [Ordinance for Repair or Demolition 212 Manhattan Avenue 867322](#)

ORDINANCE NO. 10 _____
ORDINANCE REQUIRING THE OWNER OF A DWELLING VACATED
AND CLOSED FOR A PERIOD OF AT LEAST SIX MONTHS PURSUANT TO THE
ENFORCEMENT OF THE MINIMUM HOUSING CODE TO REPAIR OR DEMOLISH
AND REMOVE THE DWELLING LOCATED AT 212 MANHATTAN AVENUE
TAX PARCEL NUMBER 018555

WHEREAS, pursuant to the enforcement of the Minimum Housing Code contained in Article F of Chapter 1 of Title 9 of the Code of the City of Greenville, North Carolina, as authorized by the provisions of Part 6 of Article 19 of Chapter 160A of the North Carolina General Statutes, the dwelling described herein has been vacated and closed for a period of at least six (6) months;

WHEREAS, the City Council of the City of Greenville hereby finds that the owner has abandoned the intent and purpose to repair, alter or improve the dwelling described herein in order to render it fit for human habitation and the continuation of the dwelling in its vacated and closed state would be inimical to the health, safety, morals and welfare of the city in that the dwelling would continue to deteriorate, would create a fire and safety hazard, would be a threat to children and vagrants, would attract persons intent on criminal activities, would cause or contribute to blight and the deterioration of property values in the area, and would render unavailable property and a dwelling which might otherwise have been made available to ease the persistent shortage of decent and affordable housing in this State; and

WHEREAS, G.S. 160A-443 (5), which applies to the City of Greenville pursuant to the provisions of Chapter 200 of the 2005 Session Laws of the North Carolina General Assembly, and Section 9-1-111 of the Code of the City of Greenville, North Carolina, empowers the City Council of the City of Greenville to enact this ordinance;

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Greenville that:

Section 1. The owner(s), Pearline K. Felder Life Estate, of the dwelling located at 212 Manhattan Avenue, in the City of Greenville, North Carolina, is hereby directed and required to either repair said dwelling so that it fully complies with the standards of the Minimum Housing Code or to demolish and remove said dwelling within ninety (90) days from the effective date of this ordinance.

Section 2. No building or repair permits shall be issued to the owner or representative of the owner without prior approval of the Code Enforcement Officer. Failure to comply with any approval of the Code Enforcement Officer shall result in recession of any building permit.

Section 3. The Code Enforcement Officer is hereby authorized and directed to proceed to either repair or demolish and remove the dwelling in the event the owner fails to comply with the provisions of Section 1 of this ordinance within ninety (90) days, or fails to comply with any approval by the Code Enforcement Officer in Section 2, said dwelling being located at 212 Manhattan Avenue and owned by Pearline K. Felder Life Estate.

Section 4. The cost of repair or demolition and removal shall constitute a lien against the real property upon which the cost was incurred. The lien shall be filed, have the same priority, and be collected in the same manner as the lien for special assessment established by Article 10 of Chapter 160A of the North Carolina General Statutes. The material of the dwelling and any personal property, fixtures, or appurtenances found in or attached to the dwelling shall be sold and the proceeds shall be credited against the cost of removal or

demolition and any balance remaining shall be deposited in superior court where it shall be secured and disbursed in the manner provided by G.S. 160A-443 (6).

Section 5. This ordinance shall be recorded in the Office of the Register of Deeds of Pitt County and shall be indexed in the name of the property owner in the grantor index.

Section 6. This ordinance shall become effective upon its adoption.

This the 10th day of June, 2010.

Patricia C. Dunn, Mayor

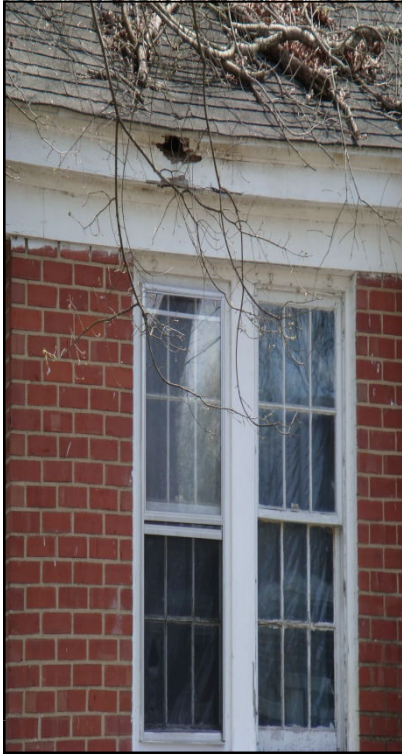
ATTEST:

Carol L. Barwick, City Clerk



Item # 7





Item # 7



City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

Title of Item: Ordinance requiring the repair or the demolition and removal of the dwelling located at 1505 Myrtle Avenue

Explanation: The Code Enforcement Officer for the City of Greenville is requesting that the City Council approve an ordinance requiring the owner of a dwelling which has been vacated and closed for a period of at least six months pursuant to the enforcement of the Minimum Housing Code to repair or demolish and remove the dwelling located at 1505 Myrtle Avenue. The ordinance provides that the owner has 90 days to repair or demolish and remove the dwelling and if the owner fails to accomplish this within 90 days, then the City will proceed with repairing or demolishing and removing the dwelling.

The initial notice of violation was sent by certified mail on April 14, 2009, to the property owner informing the owner of the condition of the abandoned structure and minimum housing violations cited by the Code Enforcement Officer and of the remedies necessary to bring the structure into compliance. Staff has attempted to work with the owner, but no repairs have been made. The most recent notice to the owner was sent on May 11, 2010, and provided notice to the owner that the dwelling was considered as an abandoned structure.

The dwelling has been vacated and closed for a period of at least six months. The utilities to the dwelling have been disconnected since September 7, 2005.

There have been 8 Code Enforcement cases initiated on this property since 1998, ranging from public nuisance to minimum housing and abandoned structure. The Police Department has responded to 27 calls for service at this property since January 2000. Calls include disputes, shots fired, sexual assault, and trespassing.

The tax value on the property as of May 12, 2010, was \$25,051 (the building value is \$22,051 and the land value is \$3,000).

The estimated costs to repair the property are \$20,014.10.

Fiscal Note:

Costs to test and abate asbestos (if present) and demolition costs will be approximately \$10,000 due to the size of the structure.

The cost of repair or demolition and removal shall constitute a lien against the real property upon which the cost was incurred. The lien shall be filed, have the same priority, and be collected in the same manner as the lien for special assessment established by Article 10 of Chapter 160A of the North Carolina General Statutes.

Recommendation:

Approval of the ordinance requiring the repair or demolition and removal of the dwelling located at 1505 Myrtle Avenue.

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / click to download

[Photo Description of Property](#)

[Ordinance for Repair or Demolition 1505 Myrtle Ave 867174](#)

ORDINANCE NO. 10-_____
ORDINANCE REQUIRING THE OWNER OF A DWELLING VACATED
AND CLOSED FOR A PERIOD OF AT LEAST SIX MONTHS PURSUANT TO THE
ENFORCEMENT OF THE MINIMUM HOUSING CODE TO REPAIR OR DEMOLISH
AND REMOVE THE DWELLING LOCATED AT 1505 MYRTLE AVENUE
TAX PARCEL NUMBER 022636

WHEREAS, pursuant to the enforcement of the Minimum Housing Code contained in Article F of Chapter 1 of Title 9 of the Code of the City of Greenville, North Carolina, as authorized by the provisions of Part 6 of Article 19 of Chapter 160A of the North Carolina General Statutes, the dwelling described herein has been vacated and closed for a period of at least six (6) months;

WHEREAS, the City Council of the City of Greenville hereby finds that the owner has abandoned the intent and purpose to repair, alter or improve the dwelling described herein in order to render it fit for human habitation and the continuation of the dwelling in its vacated and closed state would be inimical to the health, safety, morals and welfare of the city in that the dwelling would continue to deteriorate, would create a fire and safety hazard, would be a threat to children and vagrants, would attract persons intent on criminal activities, would cause or contribute to blight and the deterioration of property values in the area, and would render unavailable property and a dwelling which might otherwise have been made available to ease the persistent shortage of decent and affordable housing in this State; and

WHEREAS, G.S. 160A-443 (5), which applies to the City of Greenville pursuant to the provisions of Chapter 200 of the 2005 Session Laws of the North Carolina General Assembly, and Section 9-1-111 of the Code of the City of Greenville, North Carolina, empowers the City Council of the City of Greenville to enact this ordinance;

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Greenville that:

Section 1. The owner(s), Pearline K. Felder Life Estate, Boyise Felder Jr, Etal, of the dwelling located at 1505 Myrtle Avenue, in the City of Greenville, North Carolina, is hereby directed and required to either repair said dwelling so that it fully complies with the standards of the Minimum Housing Code or to demolish and remove said dwelling within ninety (90) days from the effective date of this ordinance.

Section 2. No building or repair permits shall be issued to the owner or representative of the owner without prior approval of the Code Enforcement Officer. Failure to comply with any approval of the Code Enforcement Officer shall result in recession of any building permit.

Section 3. The Code Enforcement Officer is hereby authorized and directed to proceed to either repair or demolish and remove the dwelling in the event the owner fails to comply with the provisions of Section 1 of this ordinance within ninety (90) days, or fails to comply with any approval by the Code Enforcement Officer in Section 2, said dwelling being located at 1505 Myrtle Avenue and owned by Pearline K. Felder Life Estate, Boyise Felder Jr, Etal.

Section 4. The cost of repair or demolition and removal shall constitute a lien against the real property upon which the cost was incurred. The lien shall be filed, have the same priority, and be collected in the same manner as the lien for special assessment established by Article 10 of Chapter 160A of the North Carolina General Statutes. The material of the dwelling and any personal property, fixtures, or appurtenances found in or attached to the dwelling shall be sold and the proceeds shall be credited against the cost of removal or

demolition and any balance remaining shall be deposited in superior court where it shall be secured and disbursed in the manner provided by G.S. 160A-443 (6).

Section 5. This ordinance shall be recorded in the Office of the Register of Deeds of Pitt County and shall be indexed in the name of the property owner in the grantor index.

Section 6. This ordinance shall become effective upon its adoption.

This the 10th day of June, 2010.

Patricia C. Dunn, Mayor

ATTEST:

Carol L. Barwick, City Clerk



Item # 8



Item # 8



Item # 8



City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

Title of Item: Ordinance requiring the repair or the demolition and removal of the dwelling located at 1506 Myrtle Avenue

Explanation: The Code Enforcement Officer for the City of Greenville is requesting that the City Council approve an ordinance requiring the owner of a dwelling which has been vacated and closed for a period of at least six months pursuant to the enforcement of the Minimum Housing Code to repair or demolish and remove the dwelling located at 1506 Myrtle Avenue. The ordinance provides that the owner has 90 days to repair or demolish and remove the dwelling and if the owner fails to accomplish this within 90 days, then the City will proceed with repairing or demolishing and removing the dwelling.

The initial notice of violation was sent by certified mail on April 14, 2009, to the property owner informing the owner of the condition of the abandoned structure and minimum housing violations cited by the Code Enforcement Officer and of the remedies necessary to bring the structure into compliance. Staff has attempted to work with the owner, but no repairs have been made. The most recent notice to the owner was sent on May 11, 2010, and provided notice to the owner that the dwelling was considered as an abandoned structure.

The dwelling has been vacated and closed for a period of at least six months. The utilities to the dwelling have been disconnected since April 10, 2007, on side A and September 17, 2007, on side B.

There have been seven Code Enforcement cases initiated on this property since 1998 ranging from public nuisance to minimum housing and abandoned structure. The Police Department has responded to 23 calls for service at this property since January 2000. Calls include disputes, shots fired, sexual assault, and trespassing.

The tax value on the property as of May 12, 2010, was \$33,811 (the building value is \$29,221, extra features are valued at \$90, and the land value is \$4,500).

The estimated costs to repair the property are \$34,026.20.

Fiscal Note:

Costs to test and abate asbestos (if present) and demolition costs will be approximately \$10,000 due to the size of the structure.

The cost of repair or demolition and removal shall constitute a lien against the real property upon which the cost was incurred. The lien shall be filed, have the same priority, and be collected in the same manner as the lien for special assessment established by Article 10 of Chapter 160A of the North Carolina General Statutes.

Recommendation:

Approval of the ordinance requiring the repair or demolition and removal of the dwelling located at 1506 Myrtle Avenue.

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / click to download

 [Photo Description of Property](#)

 [Ordinance_for_Repair_or_Demolition_1506_Myrtle_Avenue_867317](#)

ORDINANCE NO. 10-_____
ORDINANCE REQUIRING THE OWNER OF A DWELLING VACATED
AND CLOSED FOR A PERIOD OF AT LEAST SIX MONTHS PURSUANT TO THE
ENFORCEMENT OF THE MINIMUM HOUSING CODE TO REPAIR OR DEMOLISH
AND REMOVE THE DWELLING LOCATED AT 1506 MYRTLE AVENUE
TAX PARCEL NUMBER 024625

WHEREAS, pursuant to the enforcement of the Minimum Housing Code contained in Article F of Chapter 1 of Title 9 of the Code of the City of Greenville, North Carolina, as authorized by the provisions of Part 6 of Article 19 of Chapter 160A of the North Carolina General Statutes, the dwelling described herein has been vacated and closed for a period of at least six (6) months;

WHEREAS, the City Council of the City of Greenville hereby finds that the owner has abandoned the intent and purpose to repair, alter or improve the dwelling described herein in order to render it fit for human habitation and the continuation of the dwelling in its vacated and closed state would be inimical to the health, safety, morals and welfare of the city in that the dwelling would continue to deteriorate, would create a fire and safety hazard, would be a threat to children and vagrants, would attract persons intent on criminal activities, would cause or contribute to blight and the deterioration of property values in the area, and would render unavailable property and a dwelling which might otherwise have been made available to ease the persistent shortage of decent and affordable housing in this State; and

WHEREAS, G.S. 160A-443 (5), which applies to the City of Greenville pursuant to the provisions of Chapter 200 of the 2005 Session Laws of the North Carolina General Assembly, and Section 9-1-111 of the Code of the City of Greenville, North Carolina, empowers the City Council of the City of Greenville to enact this ordinance;

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Greenville that:

Section 1. The owner(s), Pearline K. Felder, of the dwelling located at 1506 Myrtle Avenue, in the City of Greenville, North Carolina, is hereby directed and required to either repair said dwelling so that it fully complies with the standards of the Minimum Housing Code or to demolish and remove said dwelling within ninety (90) days from the effective date of this ordinance.

Section 2. No building or repair permits shall be issued to the owner or representative of the owner without prior approval of the Code Enforcement Officer. Failure to comply with any approval of the Code Enforcement Officer shall result in recession of any building permit.

Section 3. The Code Enforcement Officer is hereby authorized and directed to proceed to either repair or demolish and remove the dwelling in the event the owner fails to comply with the provisions of Section 1 of this ordinance within ninety (90) days, or fails to comply with any approval by the Code Enforcement Officer in Section 2, said dwelling being located at 1506 Myrtle Avenue and owned by Pearline K. Felder.

Section 4. The cost of repair or demolition and removal shall constitute a lien against the real property upon which the cost was incurred. The lien shall be filed, have the same priority, and be collected in the same manner as the lien for special assessment established by Article 10 of Chapter 160A of the North Carolina General Statutes. The material of the dwelling and any personal property, fixtures, or appurtenances found in or attached to the dwelling shall be sold and the proceeds shall be credited against the cost of removal or

demolition and any balance remaining shall be deposited in superior court where it shall be secured and disbursed in the manner provided by G.S. 160A-443 (6).

Section 5. This ordinance shall be recorded in the Office of the Register of Deeds of Pitt County and shall be indexed in the name of the property owner in the grantor index.

Section 6. This ordinance shall become effective upon its adoption.

This the 10th day of June, 2010.

Patricia C. Dunn, Mayor

ATTEST:

Carol L. Barwick, City Clerk



Item # 9



Item # 9



07/04/2009

07/04/2009

Item # 9



City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

Title of Item: Resolution authorizing the sale of City-owned property at 907 Douglas Avenue

Explanation: This is a request to authorize the sale of the City-owned property located at 907 Douglas Avenue, Pitt County tax parcel number 013547, to Ms. Deondree R. Taylor. The new single-family dwelling features a three-bedroom, two-bath home with fair market value set previously at \$95,000 by action of City Council on August 11, 2008. Ms. Taylor proposes a closing date on or before July 15, 2010. Ms. Taylor will occupy the structure as her principal residence.

Ms. Taylor made a \$500 earnest money deposit, and she received preapproval from her mortgage lender.

City Council must hold a public hearing prior to the approval of a resolution authorizing the conveyance of the home to Ms. Taylor.

Fiscal Note: The home's sales price is \$95,000. Proceeds will be used to reimburse the 2004 bond fund for expenses involved in the home's development and construction costs.

Recommendation: Following a public hearing, approve the attached resolution authorizing the sale of City-owned property at 907 Douglas Avenue to Deondree R. Taylor.

Attachments / click to download

 [907 Douglas contract](#)

 [Resolution Authorizing the Sale of 907 Douglas Avenue 868352](#)

RESOLUTION NO. 10-____
RESOLUTION AUTHORIZING THE SALE OF CERTAIN REAL PROPERTY TO
DEONDREE R. TAYLOR FOR HOMEOWNERSHIP

WHEREAS, the City of Greenville has established the West Greenville Certified Redevelopment Area and a program to increase homeownership within this area;

WHEREAS, the City of Greenville recognizes the importance of homeownership for low and moderate income persons and intends to dispose of certain properties owned by the City of Greenville for this purpose;

WHEREAS, the City of Greenville is authorized pursuant to North Carolina General Statute 160A-456 to undertake community development programs and activities and to exercise powers granted by law to municipal housing authorities and is authorized pursuant to North Carolina General Statute 160A-457 to acquire and dispose of property for redevelopment as a part of a community development program;

WHEREAS, pursuant to the aforelisted authority, the City of Greenville has acquired and developed certain properties for the purpose of resale for development of housing for ownership by low and moderate income persons, including the property located at 907 Douglas Avenue; and

WHEREAS, the City Council, at its June 10, 2010, meeting, held a public hearing on the proposed sale of property located at 907 Douglas Avenue to Deondree R. Taylor for the purposes described herein, and notice of said public hearing was published and the public hearing was held in accordance with the provisions G.S. 160A-457;

NOW THEREFORE BE IT RESOLVED by the City Council of the City of Greenville that it does hereby approve the sale of the property located at 907 Douglas Avenue to Deondree R. Taylor for \$95,000, said amount being not less than the appraised value of said property.

BE IT FURTHER RESOLVED by the City Council of the City of Greenville that the Mayor and City Clerk be and are hereby authorized to execute the deed and any other necessary documents to accomplish the conveyance of said property to said person.

This the 10th day of June, 2010.

Patricia C. Dunn, Mayor

ATTEST:

Carol L Barwick, City Clerk

Century 21 Elite Properties
211 E Arlington Blvd
Greenville, NC 27858
Phone: 252-215-0015 Fax: 252-215-5800
Kunny@KunnyBrothers.com

OFFER TO PURCHASE AND CONTRACT

[Consult "Guidelines" (form 2G) for guidance in completing this form]

Deondree R Taylor

, as Buyer, hereby offers to purchase and

City of Greenville

, as Seller, upon acceptance of said offer, agrees to sell and convey, all of that plot, piece or parcel of land described below, together with all improvements located thereon and such fixtures and personal property as are listed below (collectively referred to as the "Property"), upon the terms and conditions set forth herein. This offer shall become a binding contract on the date that: (i) the last one of the Buyer and Seller has signed or initialed this offer or the final counteroffer, if any, and (ii) such signing or initialing is communicated to the party making the offer or counteroffer, as the case may be. Such date shall be referred to herein as the "Effective Date."

1. **REAL PROPERTY:** Located in Pitt County, State of North Carolina, being known as and more particularly described as:

Address: Street 907 Douglas Ave
City: Greenville Zip 27834

NOTE: Governmental authority over taxes, zoning, school districts, utilities and mail delivery may differ from address shown.

Legal Description:

parcel # **013547**

Subdivision Name: n/a

Plat Reference: Lot _____, Block or Section _____ as shown on Plat Book or Slide _____ at Page(s) _____ (Property acquired by Seller in Deed Book _____ at Page _____).

NOTE: Prior to signing this Offer to Purchase and Contract, Buyer is advised to review Restrictive Covenants, if any, which may limit the use of the Property, and to read the Declaration of Restrictive Covenants, By-Laws, Articles of Incorporation, Rules and Regulations, and other governing documents of the owners' association and/or the subdivision, if applicable. If the Property is subject to regulation by an owners' association, it is recommended that Buyer obtain a copy of a completed Owners' Association Disclosure And Addendum (standard form 2A12-T) prior to signing this Offer to Purchase and Contract, and include it as an addendum hereto.

2. **FIXTURES:** The following items, if any, and if owned by the Seller, are included in the purchase price free of liens: any built-in appliances, light fixtures, ceiling fans, attached floor coverings, blinds, shades, drapery rods and curtain rods, brackets and all related hardware, window and door screens, storm windows, combination doors, awnings, antennas, satellite dishes and receivers, burglar/fire/smoke alarms, pool and spa equipment, solar energy systems, attached fireplace screens, gas logs, fireplace inserts, electric garage door openers with controls, outdoor plants and trees (other than in movable containers), basketball goals, storage sheds, mailboxes, wall and/or door mirrors, attached propane gas tank, invisible fencing including all related equipment, lawn irrigation systems and all related equipment, water softener/conditioner and filter equipment, and any other items attached or affixed to the Property, EXCEPT any such items leased by the Seller and the following items:
none excluded

3. **PERSONAL PROPERTY:** The following personal property is included in the purchase price:

Refrigerator

 This form jointly approved by:
North Carolina Bar Association
North Carolina Association of REALTORS®, Inc.



Buyer initials DT Seller initials _____

4. **PURCHASE PRICE:** The purchase price is \$ 95,000.00 and shall be paid in U.S. Dollars. Should any check or other funds paid by Buyer be dishonored, for any reason, by the institution upon which the payment is drawn, Buyer shall have one (1) banking day after written notice to deliver good funds to the payee. In the event Buyer does not timely deliver good funds, the Seller shall have the right to terminate this contract upon written notice to the Buyer. The purchase price shall be paid as follows:

(a) \$ 250.00, EARNEST MONEY DEPOSIT with this offer by cash personal check bank check certified check other: money order to be deposited and held in escrow by Century 21 Elite Properties ("Escrow Agent") until the sale is closed, at which time it will be credited to Buyer, or until this contract is otherwise terminated. In the event: (1) this offer is not accepted; or (2) any of the conditions hereto are not satisfied, then all earnest monies shall be refunded to Buyer. In the event of breach of this contract by Seller, all earnest monies shall be refunded to Buyer upon Buyer's request, but such return shall not affect any other remedies available to Buyer for such breach. In the event of breach of this contract by Buyer, then all earnest monies shall be forfeited to Seller upon Seller's request, but such forfeiture shall not affect any other remedies available to Seller for such breach.

NOTE: In the event of a dispute between Seller and Buyer over the return or forfeiture of earnest money held in escrow, a licensed real estate broker ("Broker") is required by state law (and Escrow Agent, if not a Broker, hereby agrees) to retain said earnest money in the Escrow Agent's trust or escrow account until Escrow Agent has obtained a written release from the parties consenting to its disposition or until disbursement is ordered by a court of competent jurisdiction. Alternatively, if a Broker is holding the Earnest Money, the Broker may deposit the disputed monies with the appropriate clerk of court in accordance with the provisions of N.C.G.S. §93A-12.

THE PARTIES AGREE THAT A REAL ESTATE BROKERAGE FIRM ACTING AS ESCROW AGENT MAY PLACE ANY EARNEST MONIES DEPOSITED BY BUYER IN AN INTEREST BEARING TRUST ACCOUNT, AND THAT ANY INTEREST EARNED THEREON SHALL BE DISBURSED TO THE ESCROW AGENT MONTHLY IN CONSIDERATION OF THE EXPENSES INCURRED BY MAINTAINING SUCH ACCOUNT AND RECORDS ASSOCIATED THEREWITH.

- (b) \$ 250.00, (ADDITIONAL) EARNEST MONEY DEPOSIT to be paid to Escrow Agent no later than May 21, 2010, TIME BEING OF THE ESSENCE WITH REGARD TO SAID DATE.
- (c) \$ _____, OPTION FEE in accordance with paragraph 16, Alternative 2, to be paid to Seller on the Effective Date as set forth in paragraph 27. (NOTE: If Alternative 2 applies, then do not insert \$0, N/A, or leave blank.)
- (d) \$ _____, BY ASSUMPTION of the unpaid principal balance and all obligations of Seller on the existing loan(s) secured by a deed of trust on the Property in accordance with the attached Loan Assumption Addendum.
- (e) \$ _____, BY SELLER FINANCING in accordance with the attached Seller Financing Addendum.
- (f) \$ 94,500.00, BALANCE of the purchase price in cash at Closing.

5. **LOAN CONDITION:**

- (a) **Loan.** Buyer's performance is contingent upon Buyer's ability to obtain a FHA VA (attach FHA/VA Financing Addendum) Conventional Other: 90% loan at a Fixed Rate Adjustable Rate in the principal amount of _____ (plus any financed VA Funding Fee or FHA MIP) for a term of 30 year(s), at an initial interest rate not to exceed 5.500 % per annum, with mortgage loan discount points not to exceed 0.000 % and with loan origination fee not to exceed 0.000 % of the loan amount ("Loan").
- (b) **Loan Obligations:** The Buyer agrees to:
 - (i) Make written application for the Loan, authorize any required appraisal and pay any necessary fees within _____ days after the Effective Date;
 - (ii) Promptly furnish Seller written confirmation from the lender of having applied for the Loan.

If Buyer fails to furnish Seller written confirmation from the lender of having applied for the Loan, Seller may make written demand for

compliance. If Buyer does not furnish Seller written confirmation from the lender of application within five (5) days after such demand, then Seller may terminate this contract by written notice to Buyer at any time thereafter, provided Seller has not received either written evidence of the application or a waiver of the Loan Condition, and all Earnest Money shall be forfeited to Seller as liquidated damages and as Seller's sole and exclusive remedy for Buyer's failure to close, but without limiting Seller's rights under paragraph 17 for damage to the Property. Buyer further agrees to:

- (iii) Pursue qualification for and approval of the Loan diligently and in good faith;
- (iv) Continually and promptly provide requested documentation to lender.
- (c) **Buyer's Right to Terminate:** If Buyer has complied with Buyer's Loan Obligations in subsection (b) above, then within **50** days after the Effective Date (or any agreed-upon written extension of this deadline) **TIME BEING OF THE ESSENCE**, Buyer shall have the right to terminate this contract by delivering to Seller written notice of termination if Buyer, in Buyer's sole discretion, is not satisfied that the Loan will be approved and funded. If Buyer has timely delivered such notice, this contract shall be terminated and all Earnest Money shall be refunded to Buyer. If Buyer fails to deliver such notice, then Buyer will be deemed to have waived this condition. Thereafter, if Buyer fails to close based upon inability to obtain the Loan, then all Earnest Money shall be forfeited to Seller. If Buyer provides Seller reasonable third-party documentation confirming Buyer's inability to obtain the Loan, then the Earnest Money shall serve as liquidated damages and as Seller's sole and exclusive remedy for Buyer's failure to close, but without limiting Seller's rights under paragraph 17 for damage to the Property. (WARNING: Buyer is advised to consult with Buyer's lender to assure that the number of days allowed for Buyer to obtain the Loan is sufficient to allow Buyer's lender time to take all reasonable steps necessary to provide reliable loan approval.)

6. **FLOOD HAZARD DISCLOSURE/CONDITION (Choose ONE of the following alternatives):**

- To the best of Seller's knowledge, the Property IS located partly or entirely within a designated Special Flood Hazard Area. Buyer understands that it may be necessary to purchase flood insurance in order to obtain any loan secured by the Property from any federally regulated institution or a loan insured or guaranteed by an agency of the U.S. Government.
- To the best of Seller's knowledge, the Property IS NOT located partly or entirely within a designated Special Flood Hazard Area. If, following the Effective Date of this contract, it is determined that any permanent improvements on the Property are located within a designated Special Flood Hazard Area according to the current FEMA flood map, or if this contract is subject to a Loan Condition and Buyer's lender requires Buyer to obtain flood insurance as a condition of making the Loan, then in either event Buyer shall have the right to terminate this contract upon written notice to Seller, and all earnest monies shall be refunded to Buyer.

7. **OTHER CONDITIONS: (State N/A in each blank that is not a condition to this contract.)**

- (a) There must be no restriction, easement, zoning or other governmental regulation that would prevent the reasonable use of the Property for **Residential** purposes.
- (b) The Property must be in substantially the same or better condition at Closing as on the date of this offer, reasonable wear and tear excepted.
- (c) The Property must appraise at a value equal to or exceeding the purchase price or, at the option of Buyer, this contract may be terminated and all earnest monies shall be refunded to Buyer, even if the Loan Condition has been waived as provided in paragraph 5.
If this contract is NOT subject to a financing contingency requiring an appraisal, Buyer shall arrange to have the appraisal completed on or before n/a
- (d) All deeds of trust, liens and other charges against the Property, not assumed by Buyer, must be paid and satisfied by Seller prior to or at Closing such that cancellation may be promptly obtained following Closing. Seller shall remain obligated to obtain any such cancellations following Closing.
- (e) Title must be delivered at Closing by GENERAL WARRANTY DEED unless otherwise stated herein, and must be fee simple marketable and insurable title, free of all encumbrances except: ad valorem taxes for the current year (prorated through the date of Closing); utility easements and unviolated restrictive covenants that do not materially affect the value of the Property; and such other encumbrances as may be assumed or specifically approved by Buyer. The Property must have legal access to a public right of way.

Buyer initials OT Seller initials _____

8. **SPECIAL ASSESSMENTS: NOTE:** For purposes of this agreement, a "confirmed" special assessment is defined as an assessment that has been approved by a governmental agency or an owners' association for the purpose(s) stated, whether or not it is fully payable at time of closing. A "pending" special assessment is defined as an assessment that is under formal consideration by a governing body. Seller warrants that there are no pending or confirmed governmental special assessments for sidewalk, paving, water, sewer, or other improvements on or adjoining the Property, and no pending or confirmed owners' association special assessments, except as follows (Insert "None" or the identification of such assessments, if any):

none excluded

Unless otherwise agreed, Seller shall pay all owners' association assessments and all governmental assessments confirmed through the time of Closing, if any, and Buyer shall take title subject to all pending assessments disclosed by Seller herein, if any.

9. **PRORATIONS AND ADJUSTMENTS:** Unless otherwise provided, the following items shall be prorated and either adjusted between the parties or paid at Closing: (a) Ad valorem taxes on real property shall be prorated on a calendar year basis through the date of Closing; (b) Ad valorem taxes on personal property for the entire year shall be paid by the Seller unless the personal property is conveyed to the Buyer, in which case, the personal property taxes shall be prorated on a calendar year basis through the date of Closing; (c) All late listing penalties, if any, shall be paid by Seller; (d) Rents, if any, for the Property shall be prorated through the date of Closing; (e) Owners' association dues and other like charges shall be prorated through the date of Closing. Seller represents that the regular owners' association dues, if any, are \$ _____ per n/a. Unless otherwise agreed, Buyer shall pay any fees required for obtaining account payment information on owners' association dues or assessments for payment or proration and any charge made by the owners' association in connection with the disposition of the Property to Buyer, including any transfer and/or document fee imposed by the owners' association.

10. **EXPENSES:** Unless otherwise agreed, Buyer shall be responsible for all costs with respect to any loan obtained by Buyer, title search, title insurance, recording the deed and for preparation and recording of all instruments required to secure the balance of the purchase price unpaid at Closing. Seller shall pay for preparation of a deed and all other documents necessary to perform Seller's obligations under this agreement, and for excise tax (revenue stamps) required by law. Seller shall pay at Closing \$3,000.00 toward any of Buyer's expenses associated with the purchase of the Property, including any FHA/VA lender and inspection costs that Buyer is not permitted to pay, but excluding any portion disapproved by Buyer's lender.

11. **HOME WARRANTY:** If a home warranty is to be provided, select one of the following: Buyer may obtain a one-year home warranty at a cost not to exceed \$ 435.00 and Seller agrees to pay for it at Closing. Seller has obtained and will provide a one-year home warranty from _____ at a cost of \$ _____ and will pay for it at Closing.

12. **FUEL:** Buyer agrees to purchase from Seller the fuel, if any, situated in any tank on the Property at the prevailing rate with the cost of measurement thereof, if any, being paid by Seller.

13. **EVIDENCE OF TITLE:** Seller agrees to use his best efforts to deliver to Buyer as soon as reasonably possible after the Effective Date of this contract, copies of all title information in possession of or available to Seller, including but not limited to: title insurance policies, attorney's opinions on title, surveys, covenants, deeds, notes and deeds of trust and easements relating to the Property. Seller authorizes (1) any attorney presently or previously representing Seller to release and disclose any title insurance policy in such attorney's file to Buyer and both Buyer's and Seller's agents and attorneys; and (2) the Property's title insurer or its agent to release and disclose all materials in the Property's title insurer's (or title insurer's agent's) file to Buyer and both Buyer's and Seller's agents and attorneys.

14. **LABOR AND MATERIAL:** Seller shall furnish at Closing an affidavit and indemnification agreement in form satisfactory to Buyer showing that all labor and materials, if any, furnished to the Property within 120 days prior to the date of Closing have been paid for and agreeing to indemnify Buyer against all loss from any cause or claim arising therefrom.

15. **PROPERTY DISCLOSURE:**

- Buyer has received a signed copy of the N.C. Residential Property Disclosure Statement prior to the signing of this Offer to Purchase and Contract.
- Buyer has NOT received a signed copy of the N.C. Residential Property Disclosure Statement prior to the signing of this Offer to Purchase and Contract and shall have the right to terminate or withdraw this contract without penalty prior to

Buyer initials DT Seller initials _____

WHICHEVER OF THE FOLLOWING EVENTS OCCURS FIRST: (1) the end of the third calendar day following receipt of the Disclosure Statement; (2) the end of the third calendar day following the date the contract was made; or (3) Closing or occupancy by the Buyer in the case of a sale or exchange.

Exempt from N.C. Residential Property Disclosure Statement because (SEE GUIDELINES)

new construction

The Property is residential and was built prior to 1978 (Attach Lead-Based Paint or Lead-Based Paint Hazards Disclosure Addendum.)

16. **PROPERTY INSPECTION/ INVESTIGATION** (Choose ONLY ONE of the following Alternatives):

ALTERNATIVE 1:

(a) **Property Condition:** As to all permanent improvements except: **none excluded**

, it is a condition of this contract that (i) the built-in appliances, electrical system, plumbing system, heating and cooling systems, roof coverings (including flashing and gutters), doors and windows, exterior building surfaces, structural components (including foundations, retaining walls, columns, chimneys, floors, walls, ceilings and roofs), porches and decks, fireplaces and flues, crawl space and attic ventilation systems (if any), water and sewer systems (public and private), shall be performing the function for which intended and shall not be in need of immediate repair; (ii) there shall be no unusual drainage conditions or evidence of excessive moisture adversely affecting the structure(s); and (iii) there shall be no friable asbestos or existing environmental contamination.

(b) **Inspections/Repair Negotiations:** Buyer, at Buyer's expense, may inspect or obtain such inspections of the Property as Buyer deems appropriate. Only items covered by subsections (a)(i), (a)(ii), and (a)(iii) above ("Necessary Repairs") are included in repair negotiations under this contract. All inspections, including but not limited to any additional inspections recommended by Buyer's inspector(s), shall be completed and written notice of Necessary Repairs shall be given to Seller on or before **July 1, 2010** (the "Repair Notice Date"). Seller shall have the option of completing Necessary Repairs or refusing to complete them. Seller shall provide written notice to Buyer of Seller's response within **2** days of Buyer's notice, **TIME BEING OF THE ESSENCE**. Seller's failure to provide said notice as required shall constitute an election by the Seller not to complete Necessary Repairs. If Seller elects not to complete all Necessary Repairs, then Buyer shall have the option of (a) accepting the Property in its present condition, (b) accepting Seller's offer to make repairs to the extent and as described in the Seller's response, or (c) terminating this contract, in which case all earnest monies shall be refunded. The Buyer shall deliver the Buyer's written decision to Seller within five (5) days after receiving the Seller's written response, or Seller's failure to respond, **TIME BEING OF THE ESSENCE**. Failure of Buyer to provide this written decision by the time stated herein shall constitute acceptance of Seller's agreement to make repairs to the extent and as described in the Seller's response. Buyer shall have the right to verify that any Necessary Repairs have been completed in a good and workmanlike manner.

(c) **Wood-Destroying Insects:** Buyer shall have the option of obtaining, at Buyer's expense, a report from a licensed pest control operator on a standard form in accordance with the regulations of the North Carolina Structural Pest Control Committee, stating that as to all structures, except **none excluded**, there was no visible evidence of wood-destroying insects and containing no indication of visible damage therefrom. The report must be obtained on or before the Repair Notice Date. If the report indicates that there is visible evidence of wood-destroying insects or visible damage therefrom, Seller shall have the option of performing any required treatment or completing Necessary Repairs, or refusing to perform any required treatment or complete Necessary Repairs. If Seller elects not to perform required treatment or complete Necessary Repairs, Buyer shall have the option of accepting the Property without the required treatment or Necessary Repairs, or terminating the contract, in which case all earnest monies shall be refunded. Buyer and Seller shall exercise their respective rights under this subsection (c) in the same manner and within the same time limitations as set forth in subsection (b) above. The Buyer is advised that the inspection report described in this paragraph may not always reveal either structural damage or damage caused by agents or organisms other than wood-destroying insects. If new construction, Seller shall provide a standard warranty of termite soil treatment.

(d) **Radon Inspection:** Buyer shall have the option, at Buyer's expense, to have the Property tested for radon on or before the Repair Notice Date. The test result shall be deemed satisfactory to Buyer if it indicates a radon level of less than 4.0 pico curies per liter of air (as of January 1, 1997, EPA guidelines reflect an "acceptable" level as anything less than 4.0 pico curies per liter of air). If the test result exceeds the above-mentioned level, Seller shall have the

Buyer initials OT Seller initials _____

option of: a) remediating to bring the radon level within the satisfactory range; or b) refusing to remediate. Upon the completion of remediation, Buyer may have a radon test performed at Seller's expense, and if the test result indicates a radon level less than 4.0 pico curies per liter of air, it shall be deemed satisfactory to the Buyer. If Seller elects not to remediate, or if remediation is attempted but fails to bring the radon level within the satisfactory range, Buyer shall have the option of: a) accepting the Property with its then current radon level; or b) terminating the contract, in which case all earnest monies shall be refunded Buyer and Seller shall exercise their respective rights under this subsection (d) in the same manner and within the same time limitations as set forth in subsection (b) above.

(e) **Cost Of Repair Contingency:** In addition to the above, Buyer shall have the right to terminate this contract if a reasonable estimate obtained by Buyer of total cost of Necessary Repairs equals or exceeds \$ 1,500.00. This right may be exercised by Buyer without regard to any decision by Seller to complete, or refuse to complete, Necessary Repairs. Buyer shall notify the Seller in writing of its decision to terminate this contract under this Cost of Repair Contingency no later than seven (7) days following the Repair Notice Date, **TIME BEING OF THE ESSENCE**, in which case all earnest monies shall be refunded to Buyer. Neither the cost of wood-destroying insect treatment under subsection (c) above nor the cost of radon remediation under subsection (d) above shall be included in the cost of repairs under this subsection (e).

(f) **CLOSING SHALL CONSTITUTE ACCEPTANCE OF THE PROPERTY IN ITS THEN EXISTING CONDITION UNLESS PROVISION IS OTHERWISE MADE IN WRITING.**

ALTERNATIVE 2: (This Alternative applies ONLY if Alternative 2 is checked, AND Buyer has paid the Option Fee.)

(a) **Property Investigation with Option to Terminate:** In consideration of the sum set forth in paragraph 4(c) paid by Buyer to Seller (not Escrow Agent) and other valuable consideration, the sufficiency of which is hereby acknowledged (the "Option Fee"), Buyer shall have the right to terminate this contract for any reason or no reason, whether related to the physical condition of the Property or otherwise, by delivering to Seller written notice of termination (the "Termination Notice") by 5:00 p.m. on _____, **TIME BEING OF THE ESSENCE** (the "Option Termination Date"). At any time prior to Closing, Buyer shall have the right to inspect the Property at Buyer's expense (Buyer is advised to have all inspections/investigations of the Property, including but not limited to those matters set forth in Alternative 1, performed prior to the Option Termination Date).

(b) **Exercise of Option:** If Buyer delivers the Termination Notice prior to the Option Termination Date, **TIME BEING OF THE ESSENCE**, this contract shall become null and void and all earnest monies received in connection herewith shall be refunded to Buyer; however, the Option Fee will not be refunded and shall be retained by Seller. If Buyer fails to deliver the Termination Notice to Seller prior to the Option Termination Date, then Buyer will be deemed to have accepted the Property in its physical condition existing as of the Option Termination Date; provided such acceptance shall not constitute a waiver of any rights Buyer has under paragraphs 5, 6 or 7 above. The Option Fee is not refundable, is not a part of any earnest monies, and will be credited to the purchase price at Closing.

(c) **CLOSING SHALL CONSTITUTE ACCEPTANCE OF THE PROPERTY IN ITS THEN EXISTING CONDITION UNLESS PROVISION IS OTHERWISE MADE IN WRITING.**

17. **REASONABLE ACCESS/RESTORATION AND INDEMNITY:** Seller will provide reasonable access to the Property (including working, existing utilities) through the earlier of Closing or possession by Buyer. Buyer and Buyer's agents and contractors shall have the right to enter upon the Property for the purpose of appraising and evaluating the Property, and performing the tests and inspections permitted in this contract. Buyer shall, at Buyer's expense, promptly repair any damage to the Property resulting from any activities of Buyer and Buyer's agents and contractors, but Buyer shall not be responsible for any damage caused by accepted practices either approved by the NC Home Inspector Licensure Board or applicable to any other NC licensed professional performing the inspection that reveal Necessary Repairs as defined under Alternative 1 of paragraph 16. Buyer will indemnify and hold Seller harmless from all loss, damage, claims, suits or costs, which shall arise out of any contract, agreement, or injury to any person or property as a result of any activities of Buyer and Buyer's agents and contractors relating to the Property except for any loss, damage, claim, suit or cost arising out of pre-existing conditions of the Property and/or out of Seller's negligence or willful acts or omissions. This repair obligation and indemnity shall survive this contract and any termination hereof. Buyer may conduct a walk-through inspection of the Property prior to Closing.

18. **CLOSING:** Closing shall be defined as the date and time of recording of the deed and shall be on or before July 15, 2010 (the "Closing Date"). All parties agree to execute any and all

Buyer initials OT Seller initials _____

documents and papers necessary in connection with Closing and transfer of title on or before the Closing Date, at a place designated by Buyer. The deed is to be made to Deondree R Taylor and Kymytrysse A Taylor

Absent agreement to the contrary in this contract or any subsequent modification thereto, the following terms shall apply: If either party is unable to close by the Closing Date, then provided that the party is acting in good faith and with reasonable diligence to proceed to closing, such party shall be entitled to reasonable delay of the Closing Date and shall give as much notice as possible to the non-delaying party and closing agent. In such event, however, either party for whom the Closing Date is delayed shall have a maximum of ten (10) days from the Closing Date, or any extension of the Closing Date agreed-upon in writing, in which to close without payment of interest. Following expiration of the ten-day period, the party not ready to close shall be responsible for paying to the other party (if ready, willing and able to close) interest on the purchase price at the rate of eight percent (8%) per annum accruing from the end of the ten-day period until closing occurs or the contract is terminated. Should the delay in closing continue for more than thirty (30) days from the Closing Date or last agreed-upon extension of the Closing Date, then the non-delaying party shall have the unilateral right to terminate the contract and receive the earnest money, but the right to such receipt shall not affect any other remedies available to the non-delaying party for such breach.

19. **POSSESSION:** Unless otherwise provided herein, possession shall be delivered at Closing. In the event possession is NOT to be delivered at Closing: a Buyer Possession Before Closing Agreement is attached. OR, a Seller Possession After Closing Agreement is attached. Seller shall remove, by the date possession is made available to the Buyer, all personal property which is not a part of the purchase and all garbage and debris from the Property.

20. **OTHER PROVISIONS AND CONDITIONS:**(CHECK ALL STANDARD ADDENDA THAT MAY BE A PART OF THIS CONTRACT, IF ANY, AND ATTACH HERETO. ITEMIZE ALL OTHER ADDENDA TO THIS CONTRACT, IF ANY, AND ATTACH HERETO. (NOTE: UNDER NORTH CAROLINA LAW, REAL ESTATE AGENTS ARE NOT PERMITTED TO DRAFT CONDITIONS OR CONTINGENCIES TO THIS CONTRACT.)

- Additional Provisions Addendum (Form 2A11-T)
- Back-Up Contract Addendum (Form 2A1-T)
- Contingent Sale Addendum (Form 2A2-T)
- FHA/VA Financing Addendum (Form 2A4-T)
- Insurance Availability/Affordability Addendum (Form 370-T)(NC Association of REALTORS form only)
- Lead-Based Paint Or Lead-Based Paint Hazard Addendum (Form 2A9-T)
- OTHER:
- Loan Assumption Addendum (Form 2A6-T)
- New Construction Addendum (Form 2A3-T)
- Owner's Association Disclosure And Addendum (Form 2A12-T)
- Seller Financing Addendum (Form 2A5-T)
- Vacation Rental Addendum (Form 2A13-T)

City of Greenville Home Grant Approval

21. **RISK OF LOSS:** The risk of loss or damage by fire or other casualty prior to Closing shall be upon Seller. If the improvements on the Property are destroyed or materially damaged prior to Closing, Buyer may terminate this contract by written notice delivered to Seller or Seller's agent and all deposits shall be refunded to Buyer. In the event Buyer does NOT elect to terminate this contract, Buyer shall be entitled to receive, in addition to the Property, any of the Seller's insurance proceeds payable on account of the damage or destruction applicable to the Property being purchased. Seller is advised not to cancel existing insurance on the Property until after confirming recordation of the deed.

22. **ASSIGNMENTS:** This contract may not be assigned without the written consent of all parties, but if assigned by agreement, then this contract shall be binding on the assignee and his heirs and successors.

23. **TAX DEFERRED EXCHANGE:** In the event Buyer or Seller desires to effect a tax-deferred exchange in connection with the conveyance of the Property, Buyer and Seller agree to cooperate in effecting such exchange; provided, however, that the exchanging party shall be responsible for all additional costs associated with such exchange, and provided further, that a non-exchanging party shall not assume any additional liability with respect to such tax-deferred exchange. Seller and Buyer shall execute such additional documents, at no cost to the non-exchanging party, as shall be required to give effect to this provision. (NOTE: If Alternative 2 under paragraph 16 of this contract will apply, Seller should seek advice concerning the taxation of the Option Fee.)

Buyer initials DT Seller initials _____

24. **PARTIES:** This contract shall be binding upon and shall inure to the benefit of the parties, i.e., Buyer and Seller and their heirs, successors and assigns. As used herein, words in the singular include the plural and the masculine includes the feminine and neuter genders, as appropriate.

25. **SURVIVAL:** If any provision herein contained which by its nature and effect is required to be observed, kept or performed after the Closing, it shall survive the Closing and remain binding upon and for the benefit of the parties hereto until fully observed, kept or performed.

26. **ENTIRE AGREEMENT:** This contract contains the entire agreement of the parties and there are no representations, inducements or other provisions other than those expressed herein. All changes, additions or deletions hereto must be in writing and signed by all parties. Nothing contained herein shall alter any agreement between a REALTOR® or broker and Seller or Buyer as contained in any listing agreement, buyer agency agreement, or any other agency agreement between them.

27. **NOTICE AND EXECUTION:** Any notice or communication to be given to a party herein may be given to the party or to such party's agent. Any written notice or communication in connection with the transaction contemplated by this contract may be given to a party or a party's agent by sending or transmitting it to any mailing address, e-mail address or fax number set forth in the "Notice Address" section below. Seller and Buyer agree that the "Notice Information" and "Escrow Acknowledgment" sections below shall not constitute a material part of this Offer to Purchase and Contract, and that the addition or modification of any information therein shall not constitute a rejection of an offer or the creation of a counteroffer. This contract may be signed in multiple originals, all of which together constitute one and the same instrument, and the parties adopt the word "SEAL" beside their signatures below.

28. **COMPUTATION OF DAYS:** Unless otherwise provided, for purposes of this contract, the term "days" shall mean consecutive calendar days, including Saturdays, Sundays, and holidays, whether federal, state, local or religious. For the purposes of calculating days, the count of "days" shall begin on the day following the day upon which any act or notice as provided in this contract was required to be performed or made.

Buyer has has not made an on-site personal examination of the Property prior to the making of this offer.

THE NORTH CAROLINA ASSOCIATION OF REALTORS®, INC. AND THE NORTH CAROLINA BAR ASSOCIATION MAKE NO REPRESENTATION AS TO THE LEGAL VALIDITY OR ADEQUACY OF ANY PROVISION OF THIS FORM IN ANY SPECIFIC TRANSACTION. IF YOU DO NOT UNDERSTAND THIS FORM OR FEEL THAT IT DOES NOT PROVIDE FOR YOUR LEGAL NEEDS, YOU SHOULD CONSULT A NORTH CAROLINA REAL ESTATE ATTORNEY BEFORE YOU SIGN IT.

Buyer Deondree R Taylor (SEAL) Date 05-11-10
Deondree R Taylor

City of Greenville

Seller _____ (SEAL) Date _____
By:

NOTICE INFORMATION

NOTE: INSERT THE ADDRESS AND/OR ELECTRONIC DELIVERY ADDRESS EACH PARTY AND AGENT APPROVES FOR THE RECEIPT OF ANY NOTICE CONTEMPLATED BY THIS CONTRACT. INSERT "N/A" FOR ANY WHICH ARE NOT APPROVED.

BUYER NOTICE ADDRESS:

Mailing Address:

Buyer Fax # _____ Buyer E-mail Address: _____

SELLER NOTICE ADDRESS:

Buyer initials DT Seller initials _____

Mailing Address:

Seller Fax # _____ Seller E-mail Address: _____

SELLING AGENT NOTICE ADDRESS:

Individual Selling Agent: **Tahala (Kunny) Brothers**

License #: **212607**

Firm Name: **Century 21 Elite Properties**

Acting as Buyer's Agent Seller's (sub)Agent Dual Agent

Mailing Address:
211 E Arlington Blvd , Greenville, NC, 27858

Selling Agent Fax#: **866-291-4913** Selling Agent Phone #: **252-215-0015**

Selling Agent E-mail Address: **Kunny@KunnyBrothers.com**

LISTING AGENT NOTICE ADDRESS:

Individual Listing Agent: **Chris Darden**

License #: _____

Firm Name: **Century 21 Elite**

Acting as Seller's (sub)Agent Dual Agent

Mailing Address:
211 E Arlington Blvd

Listing Agent Fax#: _____ Listing Agent Phone #: _____

Listing Agent E-mail Address: _____

ESCROW ACKNOWLEDGMENT

Escrow Agent acknowledges receipt of the earnest money and agrees to hold and disburse the same in accordance with the terms hereof.

Date _____ Firm: _____

By: _____
(Signature)



City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

-
- Title of Item:** Resolution authorizing an application to the Federal Transit Administration for a Section 5307 grant for federal operating and capital assistance for Greenville Area Transit
- Explanation:** Attached for City Council consideration is a resolution authorizing the filing and execution of a federal grant application for operating, capital, and planning funds designated for the City of Greenville to assist with the operations of Greenville Area Transit (GREAT) for FY 2010-2011. The grant funding is available to support transit systems that are open to the public in areas with populations between 50,000-200,000. The federal funds are available to reimburse the City for 50% of the operating deficit and 80% of capital and planning expenses.
- Fiscal Note:** The total federal amount allocated for the City of Greenville is \$1,110,866. Maximum matching funds are estimated at \$430,000 and are included in the FY 2010-2011 budget.
- Recommendation:** Conduct a public hearing to receive comments on the proposed grant application and adopt the attached resolution authorizing the filing and execution of an application for these federal funds.
-

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / click to download

- [Grant Application for Section 5307 Funds](#)
 - [Resolution for Section 5307 Grant Application 868567](#)
-

RESOLUTION NO. 10-____
RESOLUTION AUTHORIZING THE FILING OF AN APPLICATION TO THE FEDERAL
TRANSIT ADMINISTRATION FOR A SECTION 5307 FEDERAL GRANT FOR
OPERATING AND CAPITAL ASSISTANCE FOR GREENVILLE AREA TRANSIT

WHEREAS, the Federal Transportation Administrator has been delegated authority to award Federal financial assistance for a transportation project;

WHEREAS, the contract for financial assistance will impose certain obligations upon the Applicant, including the provision by the Applicant of the local share of the project cost;

WHEREAS, the Applicant has or will provide all annual certifications and assurances to the Federal Transit Administration required for the project;

WHEREAS, it is required by the U. S. Department of Transportation in accord with the provisions of Title VI of the Civil Rights Act of 1964 as amended, the applicant give an assurance that it will comply with Title VI of the Civil Rights Act of 1964 and the U. S. Department of Transportation requirements thereunder; and

WHEREAS, it is the goal of the applicant that minority business enterprise be utilized to the fullest extent possible in connection with this project.

NOW, THEREFORE, BE IT RESOLVED BY THE GREENVILLE CITY COUNCIL:

1. That the City Manager is authorized to execute and file applications on behalf of the City of Greenville with the Federal Transit Administration and the North Carolina Department of Transportation to aid in the financing of planning, capital and/or operating assistance projects authorized by 49 U.S.C. Chapter 53, Title 23, United States Code, and other Federal and State Statutes authorizing a project administered by the Federal Transit Administration and/or the North Carolina Department of Transportation.
2. That the City Manager is authorized to execute and file the Annual Certifications and Assurances and other documents the Federal Transit Administration requires before awarding a Federal assistance grant or cooperative agreement.
3. That the City Manager is authorized to submit additional information as the Federal Transit Administration or the North Carolina Department of Transportation may require in connection with the application or project.
4. That the City Manager is authorized to set forth and execute affirmative minority business policies in connection with the project.
5. That the City Manager is authorized to execute grant and cooperative agreements with the

Federal Transit Administration and the North Carolina Department of Transportation on behalf of the City of Greenville.

ADOPTED this the 10th day of June, 2010.

Patricia C. Dunn, Mayor

CERTIFICATION

The undersigned duly qualified City Clerk, acting on behalf of the City of Greenville, certifies that the foregoing is a true and correct copy of a resolution adopted at a legally convened meeting of the Greenville City Council on _____.

Carol L. Barwick, City Clerk

Date

SEAL

**APPLICATION FOR
FEDERAL ASSISTANCE**

1. TYPE OF SUBMISSION: Application		2. DATE SUBMITTED	Applicant Identifier
<input type="checkbox"/> Construction	Pre-application	3. DATE RECEIVED BY STATE	State Application Identifier
<input checked="" type="checkbox"/> Non-Construction	<input type="checkbox"/> Construction	4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier
<input type="checkbox"/> Non-Construction			
5. APPLICANT INFORMATION			
Legal Name: City of Greenville		Organizational Unit: Department: Public Works Department	
Organizational DUNS: 023307494		Division: Transit Division	
Address: Street: 200 West Fifth Street		Name and telephone number of person to be contacted on matters involving this application (give area code)	
City: Greenville		Prefix: Ms.	First Name: Nancy
County: Pitt		Middle Name Evans	
State: NC		Last Name Harrington	
Zip Code 27834	Suffix:		
Country: USA		Email: nharrington@greenvillenc.gov	
6. EMPLOYER IDENTIFICATION NUMBER (EIN): 56-6000229		Phone Number (give area code) 252-329-4047	Fax Number (give area code) 252-329-4535
8. TYPE OF APPLICATION: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision If Revision, enter appropriate letter(s) in box(es) (See back of form for description of letters.) Other (specify) <input type="checkbox"/> <input type="checkbox"/>		7. TYPE OF APPLICANT: (See back of form for Application Types) (c) Municipal Other (specify)	
10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: TITLE (Name of Program): FY 2010 Section 5307 Urbanized Area Apportionment 20-507		9. NAME OF FEDERAL AGENCY: Federal Transit Administration	
12. AREAS AFFECTED BY PROJECT (Cities, Counties, States, etc.): Greenville, NC		11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: Section 5307 operating and capital assistance for Greenville Area Transit, Greenville, NC.	
13. PROPOSED PROJECT Start Date: 7/1/2010		14. CONGRESSIONAL DISTRICTS OF: a. Applicant 1st & 3rd	
Ending Date: 6/30/2011		b. Project	
15. ESTIMATED FUNDING:		16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?	
a. Federal	\$ 1,110,866.00	a. Yes. <input type="checkbox"/> THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON	
b. Applicant	\$.00	DATE:	
c. State	\$.00	b. No. <input type="checkbox"/> PROGRAM IS NOT COVERED BY E. O. 12372	
d. Local	\$.00	<input checked="" type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW	
e. Other	\$.00	17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT?	
f. Program Income	\$.00	<input type="checkbox"/> Yes If "Yes" attach an explanation. <input checked="" type="checkbox"/> No	
g. TOTAL	\$ 1,110,866.00		
18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT. THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.			
a. Authorized Representative			
Prefix Mr.	First Name Wayne	Middle Name	
Last Name Bowers	Suffix		
b. Title City Manager	c. Telephone Number (give area code) 252-329-4432		
d. Signature of Authorized Representative	e. Date Signed		



City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

Title of Item: Application for funds from the federal Edward Byrne Memorial Justice Assistance Grant Program

Explanation: The Police Department has received information from the United States Justice Department that it is once again eligible to receive funds from the Edward Byrne Memorial block grant program. The Bureau of Justice Assistance designates block grants based on the size of a jurisdiction and level of activity. The Bureau of Justice Assistance informed the City that the Police Department is eligible to receive \$82,349 from this grant.

The Police Department intends to purchase additional surveillance cameras and equipment to provide greater lighting to be used in the downtown area.

The grant requires that a public hearing be held before the final application can be approved and the funds distributed. The funds will be distributed at the beginning of the next federal fiscal year, which begins on October 1, 2010.

Fiscal Note: Potential grant revenue of \$82,349.

Recommendation: Hold a public hearing as required pertaining to the Police Department making application for the Edward Byrne Memorial block grant.

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / click to download



City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

Title of Item: Updates to the Manual of Standard Designs and Details

Explanation: The Public Works Department has completed its work to update the City's Manual of Standard Designs and Details (MSDD). The attached identify proposed revisions to the MSDD. The manual includes standard designs and drawing details pertaining to public streets, storm drainage, erosion and sedimentation control, driveways, parking, plat preparation, and record drawings. The MSDD is utilized by engineers, developers, builders, and contractors to meet minimum standards for installation of required improvements in subdivisions and land development within the corporate limits of the City and its extraterritorial planning and zoning jurisdiction.

Over the past year, the Department has worked in a collaborative effort with a work group consisting of representatives from the builder, developer, and architect/engineer communities to update this manual. City staff met with the work group at various times during the revision process to present and discuss proposed revisions. This process also included a public meeting to provide residents with an opportunity to review the proposed updates and to present comments.

Following the last meeting with the work group and other interested parties on May 18, 2010, the draft MSDD was revised to eliminate reference to the new requirements pertaining to rolled type catch basins and new standards for street flooding. The City Manager and Public Works Department will continue to work with interested parties to develop recommendations on these two issues.

Public Works staff will brief City Council on the proposal, focusing on both the process and developer/consultant concerns with the document. The proposed revisions to the MSDD are presented to the City Council for consideration.

Fiscal Note: Upon final acceptance and approval of the revised MSDD, it is recommended

that an electronic version of the document be created. This will enable others to incorporate the City's details and standards into project plans. The estimated cost for this work is \$25,000. This funding will be incorporated into the upcoming fiscal year budget (FY 2010-2011).

Recommendation: Conduct a public hearing. Following the public hearing, review, revise if deemed appropriate, and adopt the proposed updates to the Manual of Standard Designs and Details.

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / click to download

 [MSDD](#)

BASINS, PIPES, AND MANHOLES

Engineered pre-cast boxes are permitted with the City Engineer's approval.

GENERAL NOTES:

Mortar Joints $1/2" \pm 1/8"$ Thick.
Class "A" concrete to be used.

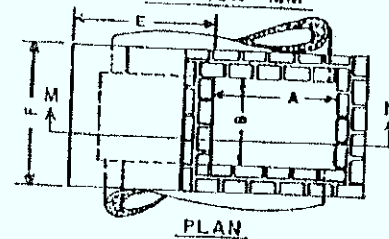
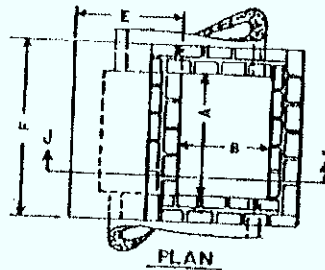
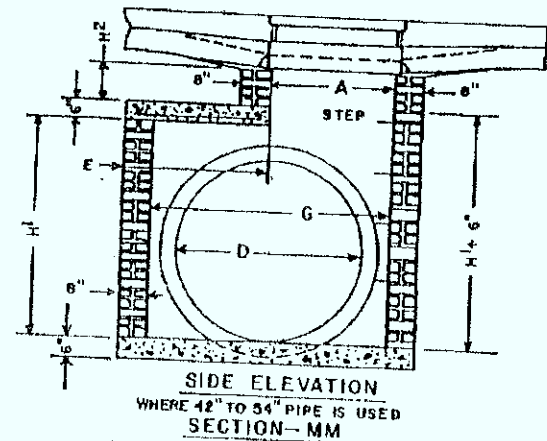
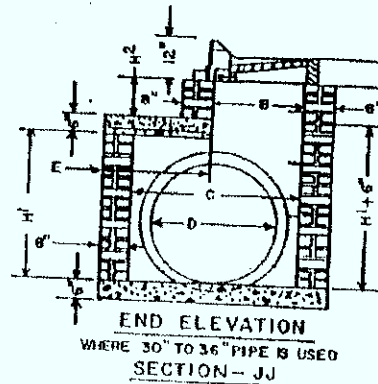
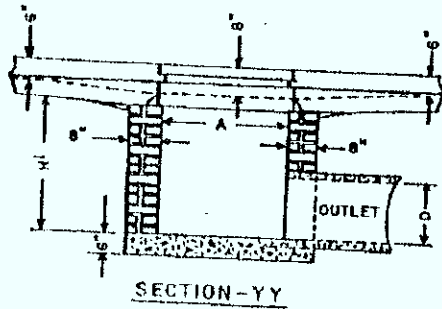
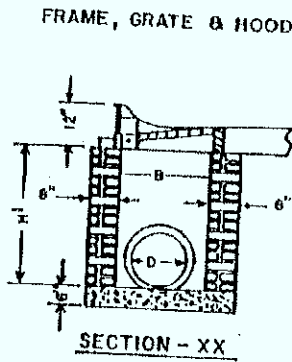
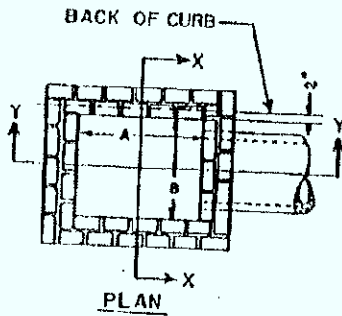
The pouring of floor slab to be accomplished by forming.

All catch basins over 3' 6" in depth shall be provided with steps 1' 0" on centers. Steps shall be in accordance with STD No. 25.12.

Concrete brick may be used in lieu of clay brick. Jumbo brick will be permitted.

For 8' 0" in height or less use 8" wall. Over 8' 0" in height use 12" wall to 6' 0" from top of wall, and 8" wall for the remaining 6' 0".

Leave weep holes as directed by the engineer.

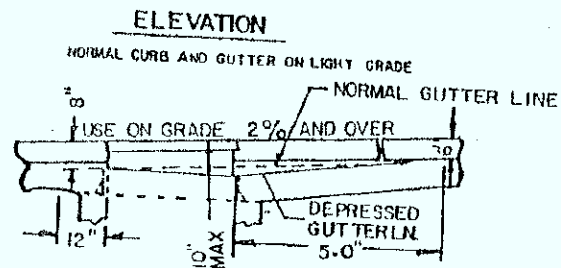
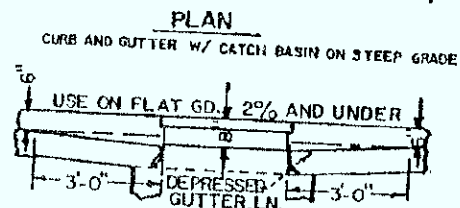
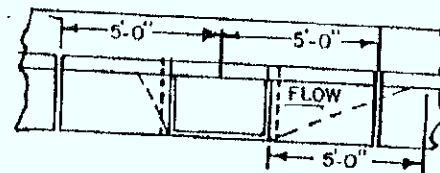
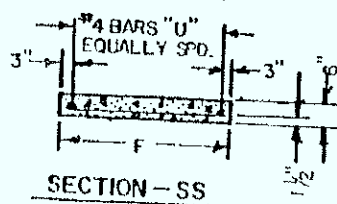
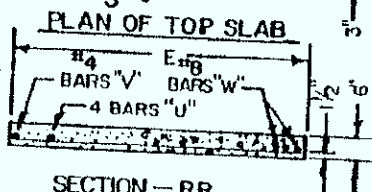
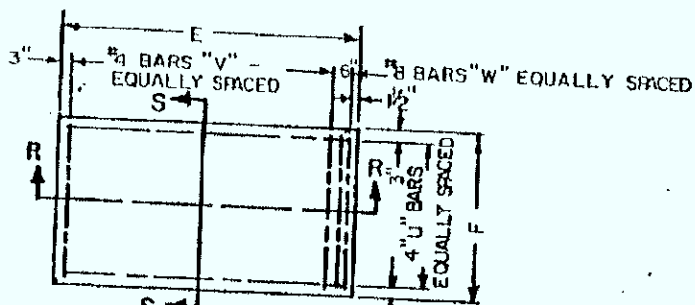


REVISIONS		
NO.	DATE	DESCRIPTION

**STANDARD BRICK CATCH BASIN
15" THRU 54" PIPE**

APPROVED: DATE May 8, 1980

PIPE D	DIMENSIONS OF BOX AND PIPE						DIMENSIONS AND QUANTITIES COVER						K CATCH BASIN MENT				CUBIC YARDS OF CONCRETE IN BOX			BRICK MASONRY	
	SPAN A	WIDTH B	WIDTH C	SPAN G	HEIGHT MIN. H ¹	HEIGHT H ²	DIMENSIONS E F		BARS - U NO. LENGTH		BARS - V NO. L		BARS - W NO. L		TOTAL LBS.	TOP SLAB	FLOOR	TOTAL	H ¹ CU. YDS.	PER FT. OF HEIGHT ABOVE MINIMUM H ¹	
	15"	3'-0"	2'-2"	---	2'-6"	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
18"	↑	↑	---	---	2'-10"	---	---	---	---	---	---	---	---	---	---	---	0.281	0.281	0.802	0.321	ABOVE MINIMUM H ¹
24"	↑	↑	---	---	3'-4"	---	---	---	---	---	---	---	---	---	---	---	0.281	0.281	0.909	0.321	ABOVE MINIMUM H ¹
30"	↑	↑	3'-4"	---	3'-2"	VA	1'-10"	4'-4"	4	1'-6"	3	4'-1"	3	4'-1"	45	0.147	0.374	0.521	1.306	0.321	ABOVE MINIMUM H ¹
36"	↑	↑	3'-10"	---	3'-8"	RA	2'-4"	4'-4"	4	2'-0"	4	4'-1"	3	4'-1"	49	0.167	0.415	0.602	1.586	0.321	ABOVE MINIMUM H ¹
42"	↑	↑	---	---	4'-4"	AB	2'-1"	3'-6"	4	1'-9"	3	3'-3"	3	3'-3"	38	0.135	0.373	0.508	1.811	0.321	ABOVE MINIMUM H ¹
48"	↑	↑	---	---	5'-0"	EF	2'-8"	3'-6"	4	2'-6"	4	3'-3"	3	3'-3"	40	0.173	0.410	0.583	2.146	0.321	ABOVE MINIMUM H ¹
54"	3'-0"	2'-2"	---	---	5'-7"	---	3'-3"	3'-6"	4	3'-0"	6	3'-3"	3	3'-3"	48	0.211	0.448	0.659	2.510	0.321	ABOVE MINIMUM H ¹



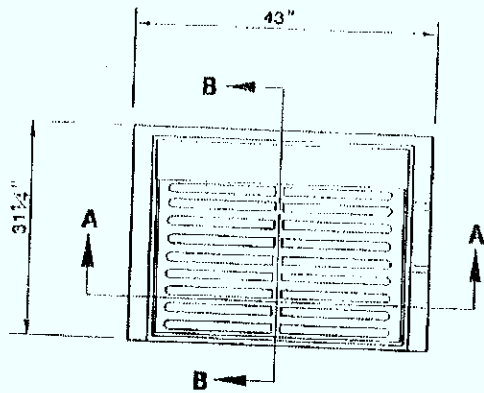
REVISIONS		
NO.	DATE	DESCRIPTION

STANDARD BRICK CATCH BASIN
15" THRU 54" PIPE
CITY OF GREENVILLE, N.C. - ENGINEERING DEPT.

APPROVED: DATE May 8, 1980

STD. NO. REV.
2500

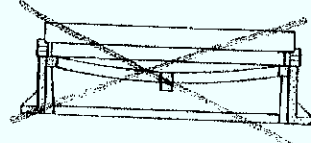
FRAME, GRATES, AND HOOD
FOR USE ON STANDARD CATCH BASIN



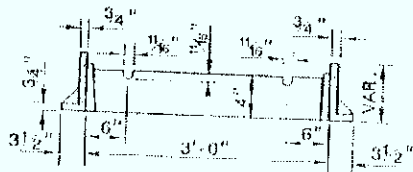
PLAN

FRAME, GRATE, & HOOD ASS'Y

SEE PAGE 2 OF 2



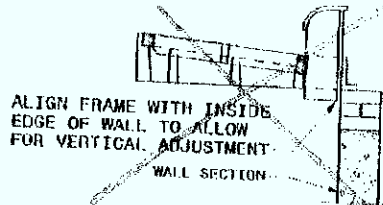
SECTION - AA



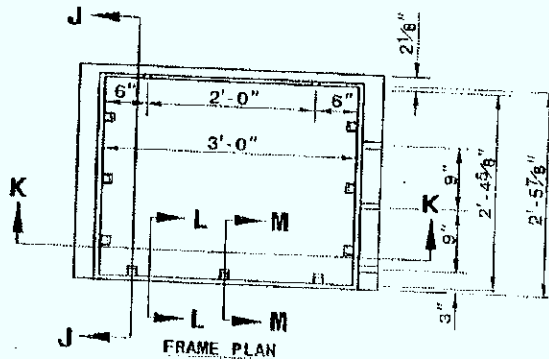
SECTION - KK

NOTE: USE TYPE "E", "F" AND "G" GRATE
UNLESS OTHERWISE NOTED.

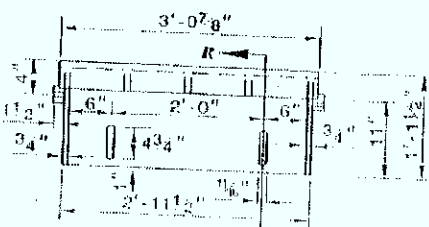
SEE PAGE 2 OF 2



SECTION - BB



FRAME PLAN



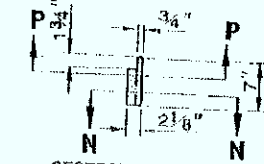
HOOD ELEVATION



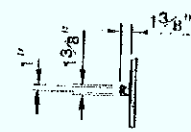
SECTION - J-L



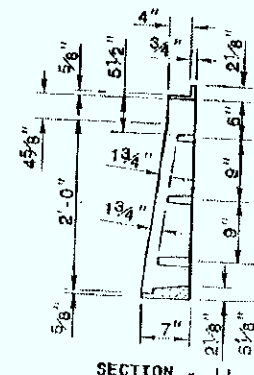
SECTION - P-P



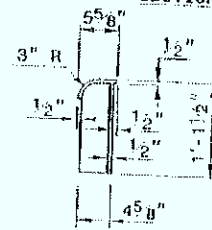
SECTION - M-N



SECTION - R-R



SECTION - L-L

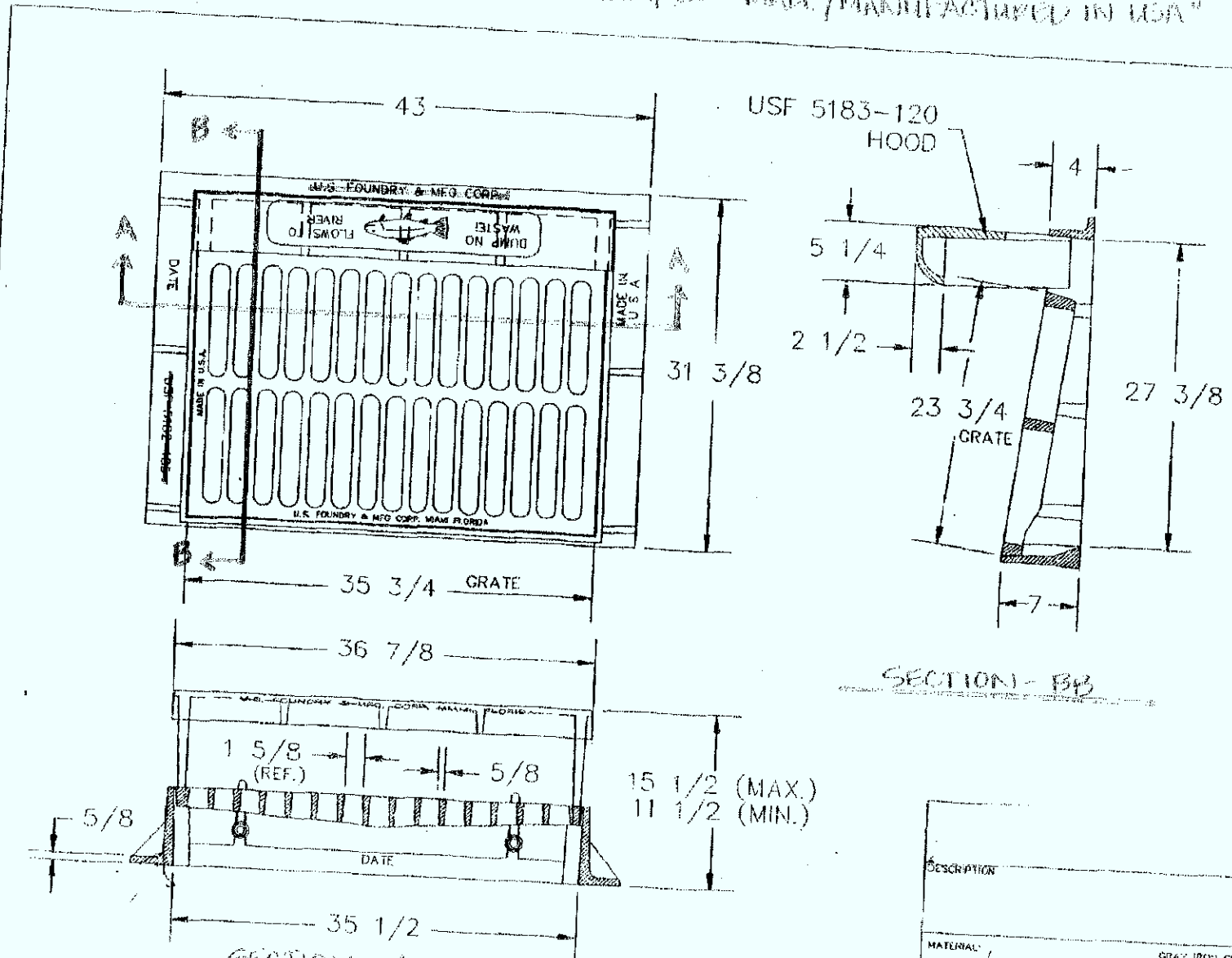


SECTION - RR

FRAME, GRATES, AND HOOD
FOR USE ON STANDARD CATCH BASIN

STD. NO. 25.03

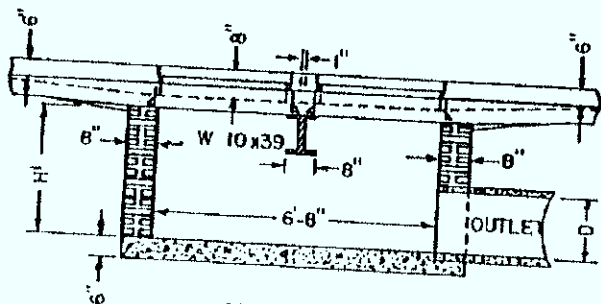
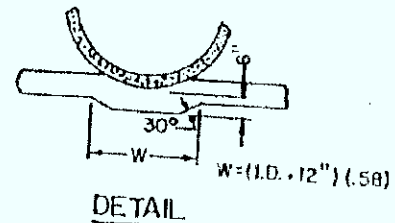
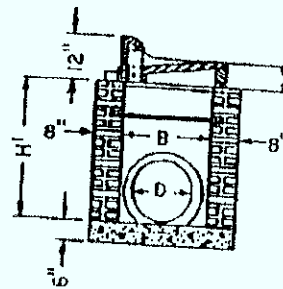
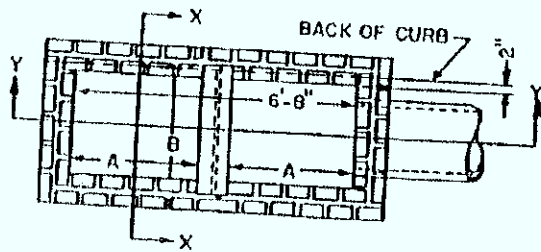
ADD NOTES: All hoods must be stamped "FLOWS TO RIVER"
 All grates must be stamped "MADE / MANUFACTURED IN USA"



DESCRIPTION	
MATERIAL	GRAY IRON CLASS.
FRAME WEIGHT:	HOOD WEIGHT:
UNLESS OTHERWISE NOTED WEIGHT IS IN POUNDS AND APPROXIMATED	
SCALE:	ITEM No.
REV. No.	DATE

REV.	DATE	DESCRIPTION	REV. No.	DATE

Item # 13 STD. NO. 25.03



GENERAL NOTES:

- MORTAR JOINTS $1/2" \pm 1/8"$ THICK
- CLASS "X" CONCRETE TO BE USED
- THE POURING OF FLOOR SLAB TO BE ACCOMPLISHED BY FORMING.
- ALL CATCH BASINS OVER 3'-6" IN DEPTH TO BE PROVIDED WITH METAL STEPS ON $1'-0" \pm$ CENTERS.
- STEPS SHALL BE IN ACCORDANCE WITH STD NO. 25.12.
- CONCRETE BRICK MAY BE USED IN LIEU OF CLAY BRICK. JUMBO BRICK WILL BE PERMITTED.
- FOR 8'-0" IN HEIGHT OR LESS USE 8" WALL, OVER 8'-0" IN HEIGHT USE 12" WALL TO 6'-0" FROM TOP OF WALL, AND 8" WALL FOR THE REMAINING 6'-0".

Engineered pre-cast boxes are permitted with the City Engineer's approval.

DIMENSIONS OF BOX AND PIPE					
PIPE	SPAN	WIDTH	HEIGHT	W 10	
D	A	B	MIN. H	LENGTH	
15"	3'-0"	2'-2"	2'-6"	2'-10"	
18"	3'-0"	2'-2"	2'-10"	2'-10"	
24"	3'-0"	2'-2"	3'-4"	2'-10"	

REVISIONS		
NO.	DATE	DESCRIPTION

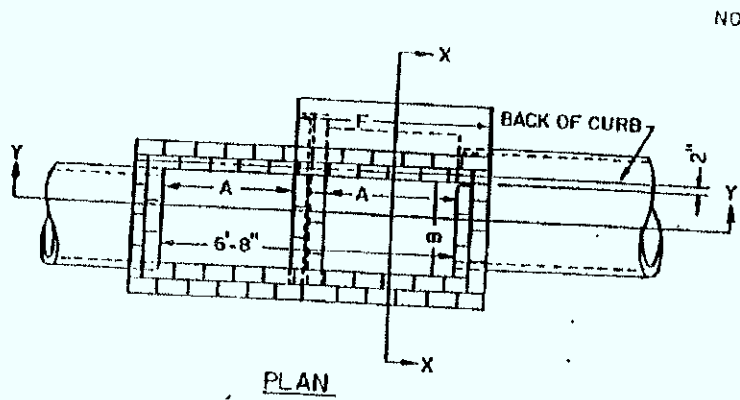
STANDARD BRICK DOUBLE CATCH BASIN
15" THRU 24" PIPE

APPROVED: DATE May 8, 1980

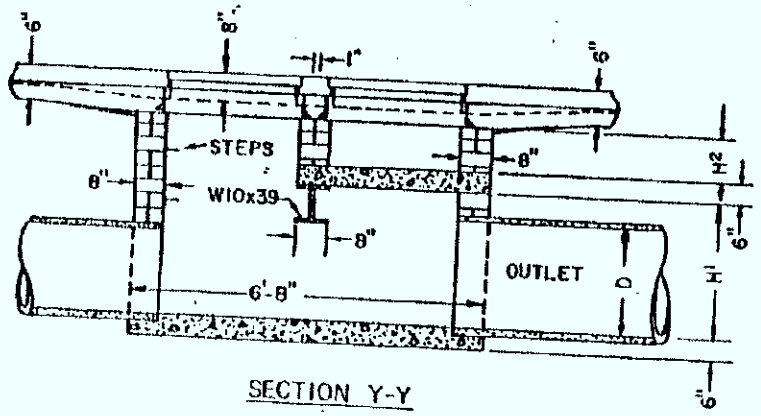
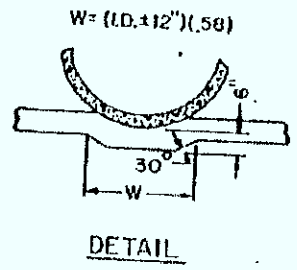
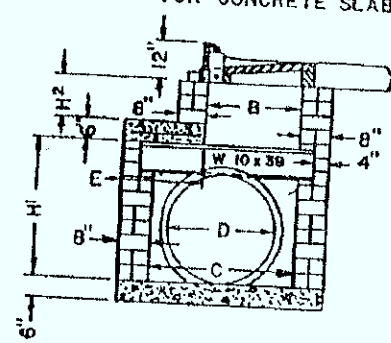
CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

STD. NO.	REV.
2504	

Item # 13



NO. 11 MINIMUM DEPTH (H') TO BE DETERMINED BY SIZE OF OUTLET PIPE
SEE STD. FOR CONCRETE SLAB DETAIL.



GENERAL NOTES:

- MORTAR JOINTS 1/2" ± 1/8" THICK.
- CLASS "A" CONCRETE TO BE USED.
- THE POURING OF FLOOR SLAB TO BE ACCOMPLISHED BY FORMING.
- ALL CATCH BASINS OVER 3'-6" IN DEPTH TO BE PROVIDED WITH METAL STEPS ON 1'-0" ± CENTERS. STEPS SHALL BE IN ACCORDANCE WITH STD. NO. 25.12.
- CONCRETE BRICK MAY BE USED IN LIEU OF CLAY BRICK. JUNBO BRICK WILL BE PERMITTED.
- FOR 8'-0" IN HEIGHT OR LESS USE 8" WALL, OVER 8'-0" IN HEIGHT USE 12" WALL TO 6'-0" FROM TOP OF WALL, AND 8" WALL FOR THE REMAINING 6'-0".

15" THRU 24" PIPE

DIMENSIONS OF BOX AND PIPE							
PIPE	SPAN	WIDTH	WIDTH	HEIGHT	HEIGHT	W 10	
D	A	B	C	MIN. H	H	LENGTH	
15"	3'-0"	2'-2"	-	2'-6"	-	2'-10"	
18"	3'-0"	2'-2"	-	2'-10"	-	2'-10"	
24"	3'-0"	2'-2"	-	3'-4"	-	2'-10"	

30" THRU 36" PIPE

DIMENSIONS OF BOX AND PIPE								COVER REINFORCING							
PIPE	SPAN	WIDTH	WIDTH	HEIGHT	HEIGHT	W 10	LENGTH	COVER DIMENSION		REINFORCING				TOT. LBS.	
								E	F	BARS-U	BARS-V	BARS-W			
D	A	B	C	MIN. H	H	LENGTH	E	F	NO.	LENGTH	NO.	LENGTH	NO.	LENGTH	
30"	3'-0"	2'-2"	3'-4"	3'-2"	VAR.	4'-0"	1'-10"	4'-4"	4	1'-6"	3	4'-1"	3	4'-1"	45
36"	3'-0"	2'-2"	3'-10"	3'-8"	VAR.	4'-6"	2'-4"	4'-4"	4	2'-0"	4	4'-1"	3	4'-1"	49

REVISIONS	
NO.	DESCRIPTION

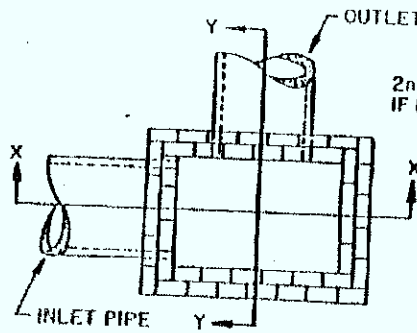
Engineered pre-cast boxes are permitted with the City Engineer's approval.

STANDARD BRICK DOUBLE CATCH BASIN
30" THRU 36" PIPE

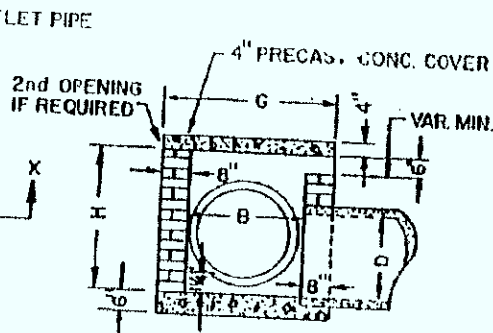
APPROVED: DATE May 8, 1980

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT. Item # 13

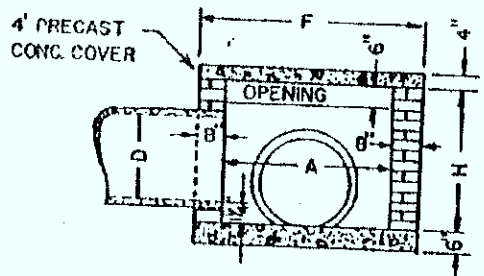
STD. NO.	REV.
2505	



PLAN



SECTION Y-Y



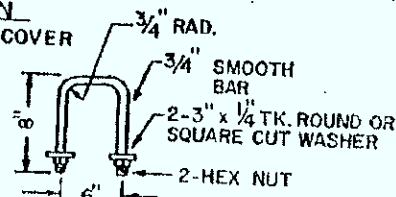
SECTION - XX

PART WHERE HANDLE IS LOCATED SHALL BE COUNTER SUNK 1", AND HANDLE SHALL BE FREE TO MOVE UP AND DOWN

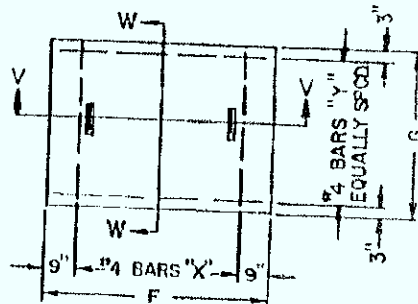


PART SECTION

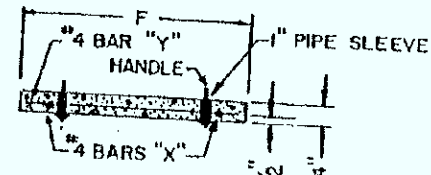
PART SECTION THRU COVER SHOWING HANDLE



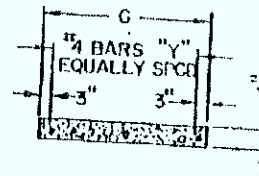
DETAIL OF HANDLE



PLAN
PRECAST COVER



SECTION - VV



SECTION - WW

GENERAL NOTES:

ALL CATCH BASINS OVER 3'-6" IN DEPTH TO BE PROVIDED WITH STEPS 12" ON CENTERS. STEPS SHALL BE IN ACCORDANCE W/ STD. NO. 25.12. ALL EXPOSED CONC CORNERS TO BE CHAMFERED 1" CLASS "AA" CONCRETE TO BE USED. ALL MORTAR JOINTS ARE TO BE 1/2" ± 1/8". ALL EXPOSED JOINTS WILL BE CONCAVE TOOLED. THE 6" OPENING SHOWN MAY BE INCREASED TO 8" MAX. IF DEEMED NECESSARY BY THE ENGINEER. FORMS ARE TO BE USED FOR THE CONSTRUCTION OF THE BOTTOM SLAB. CONCRETE BRICK MAY BE USED IN LIEU OF CLAY BRICK. JUMBO BRICK WILL BE PERMITTED. ADD FOR 8'-0" IN HEIGHT OR LESS USE 8" WALL. OVER 8'-0" IN HEIGHT USE 12" WALL TO 6'-0" FROM TOP OF WALL. AND 8" WALL FOR THE REMAINING 6'-0".

Engineered pre-cast boxes are permitted with the City Engineer's approval.

PIPE D	DIM S. OF BOX & PIPE		REINFORCING						COVER DIMENSION	
	SPAN A	WIDTH B	HEIGHT H(MIN)	BARS-X NO	LENGTH	BARS-Y NO	LENGTH	TOT. LBS.	F	G
15"	3'-6"	2'-3"	2'-7"	2	3'-4"	7	4'-7"	26	4'-10"	3'-7"
18"	4'-0"	2'-8"	2'-11"	2	3'-9"	8	5'-1"	33	5'-4"	4'-0"
24"	4'-0"	2'-8"	3'-5"	2	3'-9"	8	5'-1"	33	5'-4"	4'-0"
30"	4'-0"	3'-6"	3'-11"	2	4'-7"	9	5'-1"	37	5'-4"	4'-10"
36"	4'-0"	3'-6"	4'-6"	2	4'-7"	9	5'-1"	37	5'-4"	4'-10"
42"	4'-0"	3'-6"	4'-11"	2	4'-7"	9	5'-1"	37	5'-4"	4'-10"
48"	4'-6"	4'-0"	5'-5"	2	5'-1"	10	5'-7"	45	5'-10"	5'-4"

REVISIONS		
NO.	DATE	DESCRIPTION

SLAB TYPE CATCH BASIN

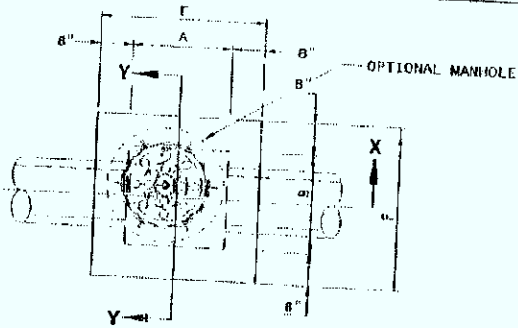
STANDARD BRICK CATCH BASIN WITH SINGLE AND MULTIPLE PIPES
15" THRU 48" PIPE

APPROVED: DATE May 8, 1980

CITY OF GREENVILLE, N.C. - ENGINEERING DEPT.

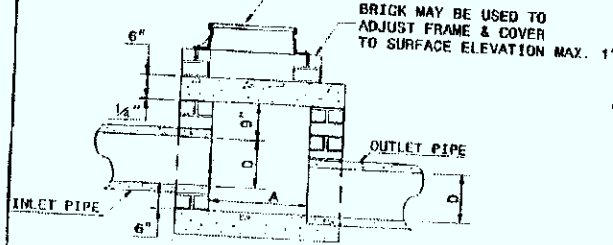
Item # 13

STD. NO. REV.
25.06



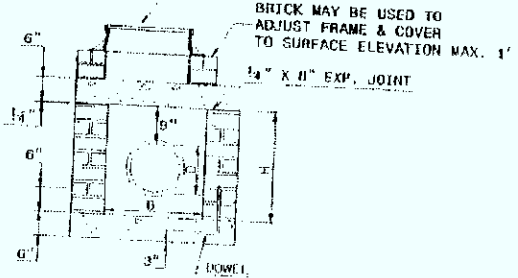
PLAN

SEE STANDARD 840.54 FOR MANHOLE COVER & FRAME OPTIONAL

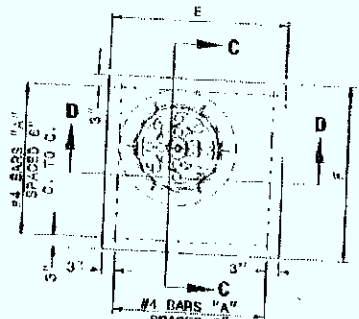


SECTION X-X

SEE STANDARD 840.54 FOR MANHOLE COVER & FRAME



SECTION Y-Y

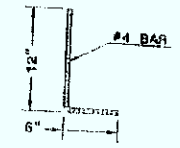


OUTLET ELEVATION

GENERAL NOTES:
 CHAMFER ALL EXPOSED CORNERS 1".
 USE CLASS ~~30~~ CONCRETE THROUGHOUT.
 USE #4 BAR DOWELS AT 12" CENTERS.
 MORTAR JOINTS 1/2" ± 1/8" THICK.
 CONCAVE TOO ALL EXPOSED JOINTS.
 USE FORMS TO CONSTRUCT THE BOTTOM SLAB.
 JUMBO BRICK WILL BE PERMITTED. CONCRETE BRICK OR 4" SOLID CONCRETE BLOCKS MAY BE USED IN LIEU OF CLAY BRICK.
 FOR 8'-0" IN HEIGHT OR LESS, USE 8" WALL. OVER 8'-0" IN HEIGHT, USE 12" WALL TO 6'-0" FROM TOP OF WALL, AND 8" WALL FOR THE REMAINING 6'-0". ADJUST DIMENSIONS AND QUANTITIES ACCORDINGLY.
 IF REINFORCED CONCRETE PIPE IS SET IN BASE SLAB OF BOX, ADD TO BASE AS SHOWN ON STANDARD NO. 840-001
 PROVIDE ALL JUNCTION BOXES OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTERS IN ACCORDANCE WITH STD. NO. 840-007
 ADJUST THE STEEL, CONCRETE AND BRICK MASONRY QUANTITIES TO INCLUDE THE ADDITION OF THE MANHOLE (I.E. DIAGONAL BARS SHORTENED AROUND OPENING IN TOP SLAB, ADDITIONAL VARIABLE HEIGHT BRICK MASONRY, OPENING IN TOP SLAB.)
 MAX. DEPTH OF THIS STRUCTURE FROM TOP OF BOTTOM SLAB TO TOP ELEVATION IS 12 FEET.



SECTION C-C OR D-D

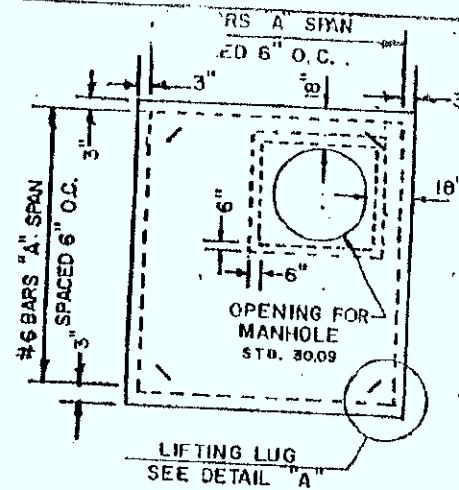
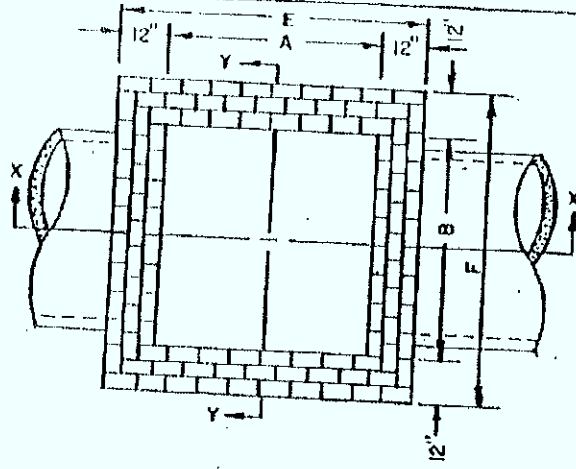


DOWEL

DIMENSIONS OF BOX AND PIPE				DIMENSIONS AND QUANTITIES FOR BRICK JUNCTION BOXES									
PIPE	SPAN	WIDTH	HEIGHT	REINFORCEMENT BARS		TOP SLAB DIMENSIONS		CUBIC YARDS			DEDUCTIONS FOR ONE PIPE		
				NO.	LENGTH	E	F	CONC.	BRICK MASONRY	WALL PER FT. HT. CU. YD.	C.S.	R.C.	
12"	2'-0"	2'-0"	2'-6"	12	3'-1"	3'-4"	3'-4"	0.312	0.591	0.265	0.070	0.032	
15"	2'-4"	2'-4"	2'-9"	14	3'-5"	3'-4"	3'-4"	0.412	0.657	0.263	0.031	0.047	
24"	3'-0"	3'-0"	3'-3"	16	4'-1"	4'-4"	4'-4"	0.498	0.814	0.296	0.044	0.065	
30"	3'-4"	3'-4"	3'-9"	16	4'-5"	4'-6"	4'-6"	0.695	1.176	0.362	0.078	0.113	
36"	4'-0"	4'-0"	4'-3"	20	5'-1"	5'-4"	5'-4"	0.807	1.481	0.395	0.122	0.170	
42"	4'-8"	4'-8"	4'-9"	22	5'-9"	6'-0"	6'-0"	1.053	1.858	0.461	0.176	0.238	
48"	5'-4"	5'-4"	5'-5"	26	6'-5"	6'-6"	6'-6"	1.393	2.503	0.527	0.240	0.323	
54"	5'-10"	5'-10"	5'-8"	28	6'-11"	7'-2"	7'-2"	1.646	2.940	0.560	0.313	0.422	
60"	6'-6"	6'-6"	6'-3"	30	7'-7"	7'-10"	7'-10"	1.902	3.502	0.609	0.395	0.535	
66"	7'-1"	7'-1"	6'-9"	32	8'-2"	8'-5"	8'-5"	2.272	4.113	0.658	0.489	0.660	
								2.624	4.776	0.708	0.591	0.798	

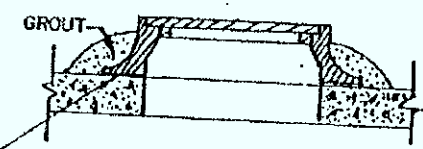
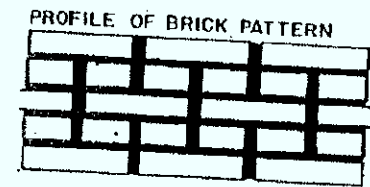
BRICK JUNCTION BOX
 (WITH OPTIONAL MANHOLE)
 15" THRU 66" PIPE

BRICK JUNCTION BOX
 (WITH OPTIONAL MANHOLE)
 15" THRU 66" PIPE



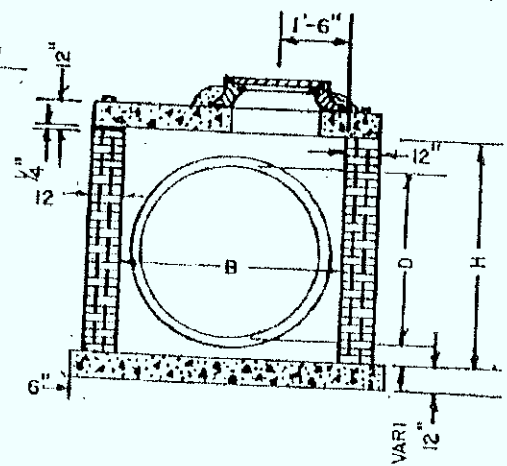
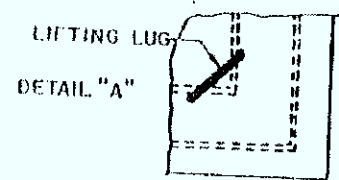
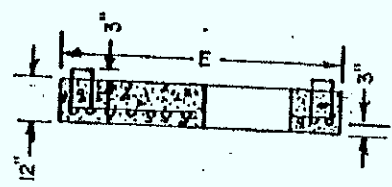
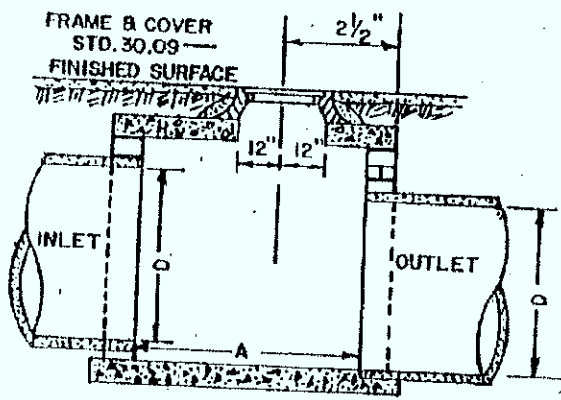
GENERAL NOTES:

- ALL EXPOSED CONC. TO BE CHAMFERED 1"
- CLASS "A" CONCRETE TO BE USED
- ALL MORTAR JOINTS ARE TO BE $\frac{1}{2} \pm \frac{1}{16}$ "
- ALL EXPOSED JOINTS SHALL BE CONCAVE TOOLED.
- FORMS ARE TO BE USED FOR CONSTRUCTION OF BOTTOM SLAB.
- JUMBO BRICK WILL BE PERMITTED *ADD*
- ALL JUNCTION BOXES OVER 3'-6" IN DEPTH SHALL BE PROVIDED W/ STEPS 1'-0" O.C. STEPS SHALL BE IN ACCORDANCE WITH STD. 25.12.



MANHOLE FRAME TO BE SET IN 1/2" OF CEMENT MORTAR.

Engineered pre-cast boxes are permitted with the City Engineer's approval.



DIMENSIONS OF BOX & PIPE						REINF. BARS	
PIPE D	SPAN A	WIDTH B	HEIGHT H	SIZE		NO.	LENGTH
72"	7'-0"	7'-0"	MIN.	9'-0"	9'-0"	72	8'-6"
84"	8'-0"	8'-0"	8'-0"	10'-0"	10'-0"	90	9'-6"
96"	9'-0"	9'-0"	8'-0"	11'-0"	11'-0"	98	10'-6"
108"	10'-0"	10'-0"	MAX.	12'-0"	12'-0"	96	11'-6"
120"	11'-0"	11'-0"	12'-0"	13'-0"	13'-0"	104	12'-6"

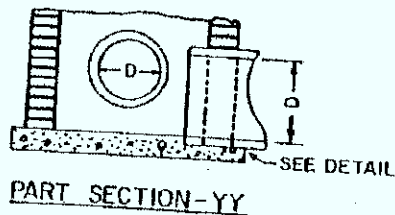
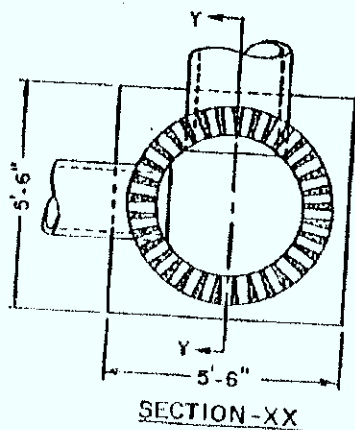
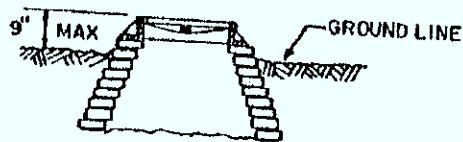
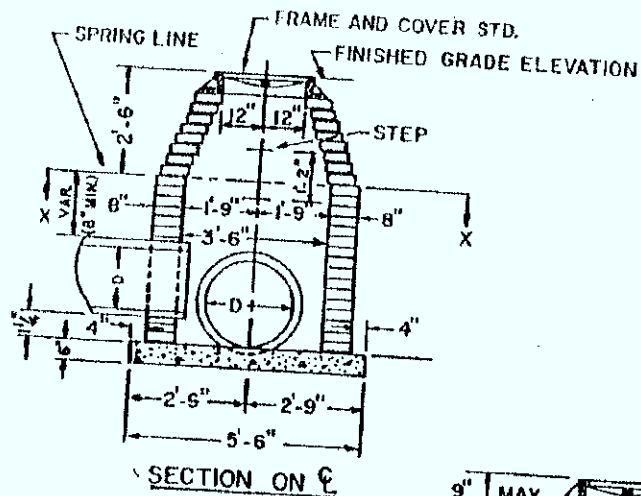
REVISIONS		
NO.	DATE	DESCRIPTION

STANDARD BRICK JUNCTION BOX
72" THRU 120" PIPE

APPROVED: DATE May 8, 1980

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

STD. NO.	REV.
2508	



GENERAL NOTES:

ALL MORTAR JOINTS ARE TO BE $1/2" + 1/8"$.

ALL EXPOSED JOINTS WILL BE CONCAVE TOOLED.

CLASS "A" CONCRETE TO BE USED FOR BASE.

FORMS ARE TO BE USED FOR THE CONSTRUCTION OF THE BASE.

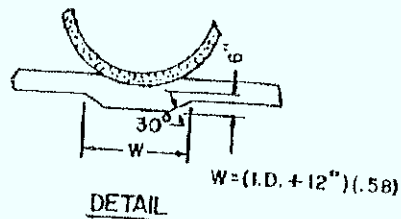
~~CONCRETE BRICK MAY BE USED IN LIEU OF CLAY BRICK.~~

~~JUMBO BRICK WILL BE PERMITTED.~~

WHERE THE MANHOLE IS EXPOSED TO ROAD TRAFFIC, THE TOP OF THE MANHOLE IS TO BE FLUSH WITH THE GROUND. AT OTHER LOCATIONS IT SHOULD BE A MINIMUM OF 9" ABOVE THE GROUND.

MANHOLES OVER 3'-6" IN DEPTH SHALL BE PROVIDED WITH STEPS 1'-0" ON CENTERS. STEPS SHALL BE IN ACCORDANCE WITH STD. NO. 25.12.

~~PRECAST SECTIONS MAY BE USED FOR ALL SECTIONS.~~

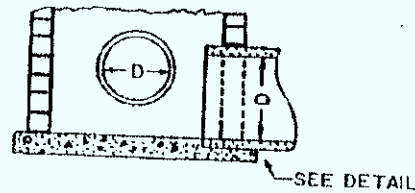
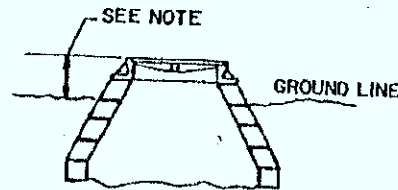
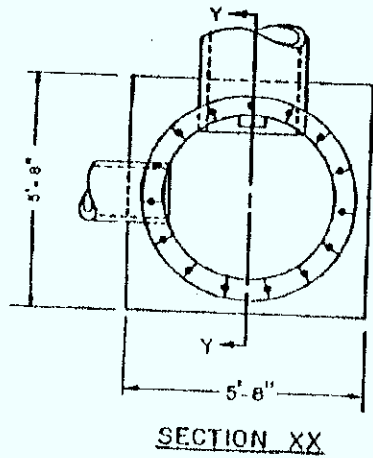
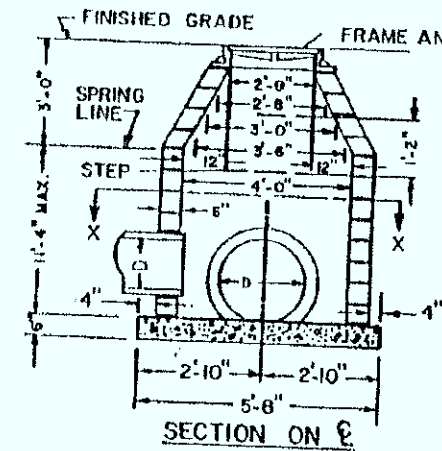


REVISIONS		
NO.	DATE	DESCRIPTION

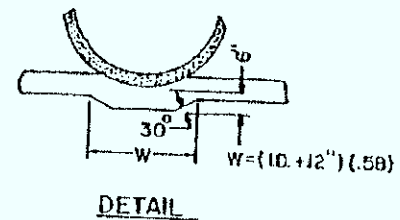
STANDARD BRICK MANHOLE
15" THRU 36" PIPE
CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

APPROVED: DATE May 8, 1980

STD. NO.	REV.
25.09	



PART SECTION YY



DETAIL

GENERAL NOTES:

ALL MORTAR JOINTS ARE TO BE 1/2" ± 1/8".

ALL EXPOSED JOINTS WILL BE CONCAVE TOOLED.

CLASS "AA" CONCRETE TO BE USED FOR BASE.

FORMS ARE TO BE USED FOR THE CONSTRUCTION OF THE BASE.

WHERE THE MANHOLE IS EXPOSED TO ROAD TRAFFIC, THE TOP OF THE MANHOLE IS TO BE FLUSH WITH THE GROUND. AT OTHER LOCATIONS IT SHOULD BE A MINIMUM OF 9" ABOVE THE GROUND.

ALL MANHOLES OVER 3'-6" IN DEPTH SHALL BE PROVIDED WITH STEPS 1' ON CENTERS. STEPS SHALL BE IN ACCORDANCE WITH STD. NO. 25.12.

REVISIONS		
NO.	DATE	DESCRIPTION

STANDARD BLOCK MANHOLE
15" THRU 36" PIPE

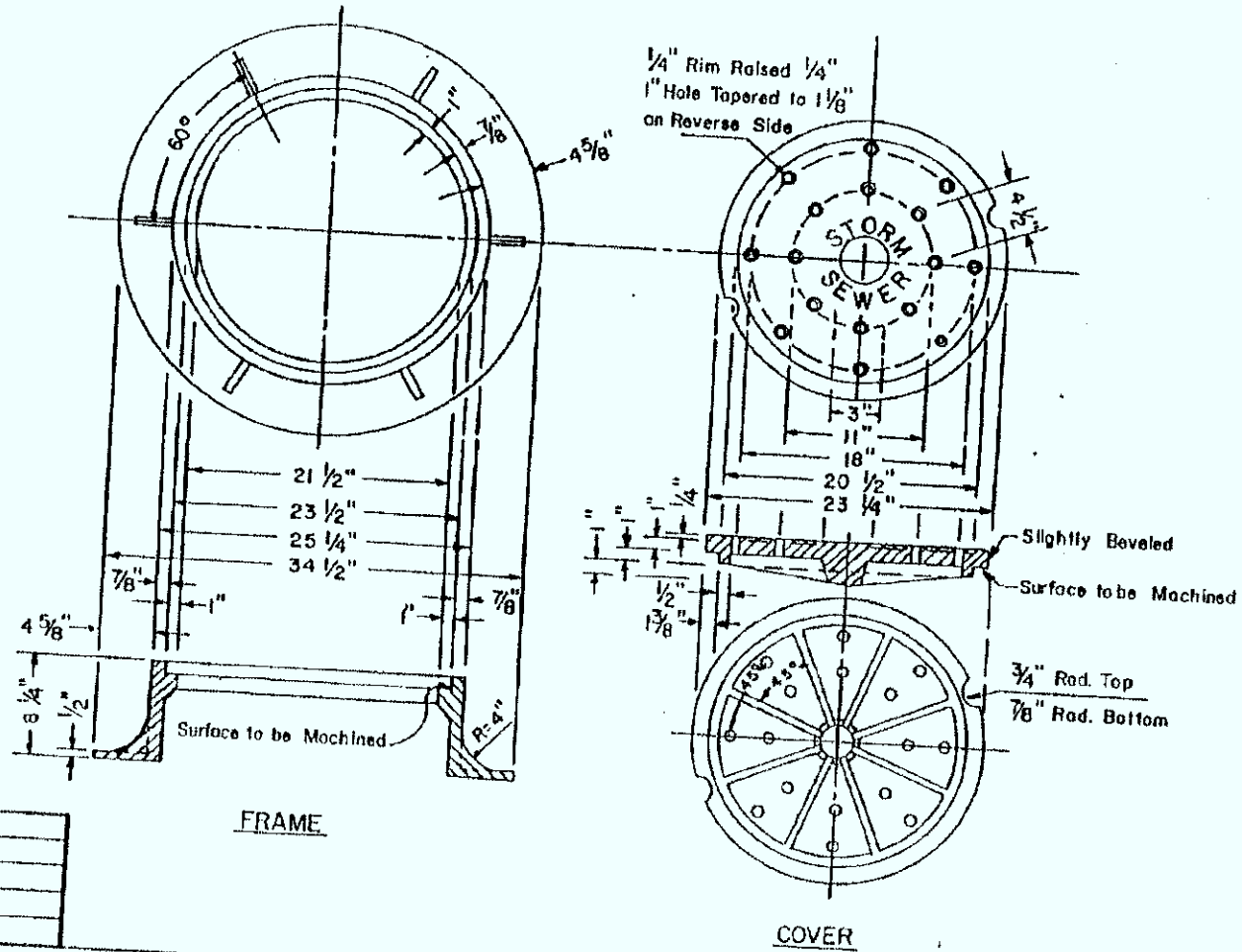
APPROVED: DATE May 8, 1980

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT. Item # 13

STD. NO.	REV.
25.10	

GENERAL NOTES:

ALL CASTINGS SHALL BE MADE OF CLEAN, EVEN GRAIN, TOUGH GREY CAST IRON. CASTING SHALL BE SMOOTH, TRUE TO PATTERN AND FREE FROM PROJECTIONS, SAND HOLES, WARP AND OTHER DEFECTS.
 ALL CASTINGS SHALL BE COATED WITH COAL TAR PITCH VARNISH WHILE HOT.
 ALL COVERS USED FOR STORM DRAIN STRUCTURES SHALL HAVE "STORM SEWER" CAST ON THEM.
 THE IRON USED FOR THESE CASTINGS SHALL CONFORM TO THE SPECIFICATIONS OF ASTM DESIGNATION A48 FOR CLASS 30 GREY IRON.
 APPROXIMATE WEIGHT 383 POUNDS.



REVISIONS		
NO.	DATE	DESCRIPTION

STANDARD MANHOLE FRAME, COVER

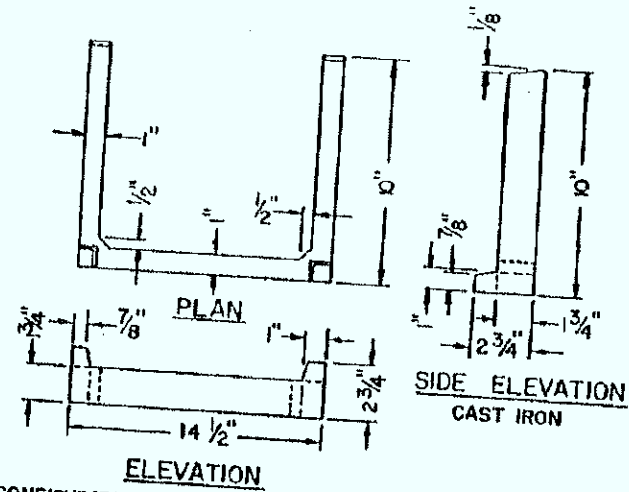
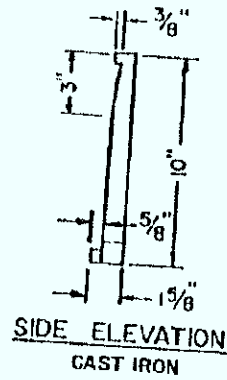
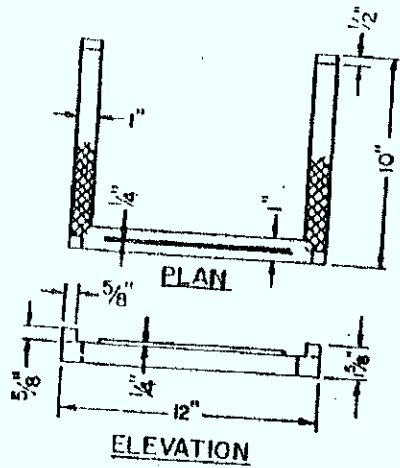
APPROVED: DATE May 8, 1980

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

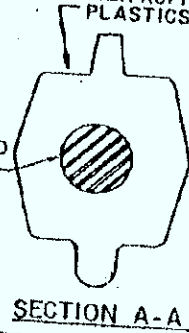
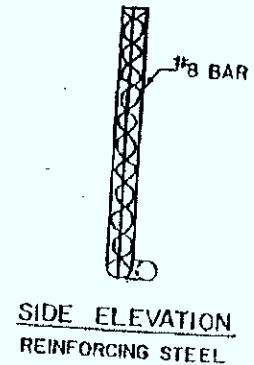
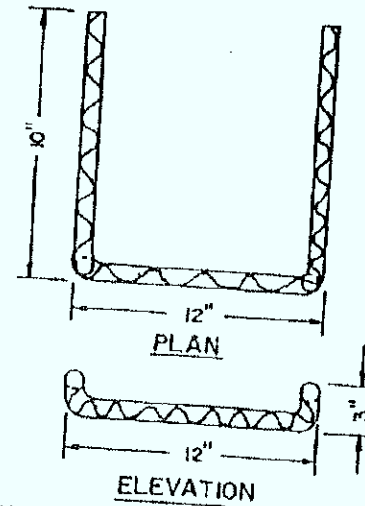
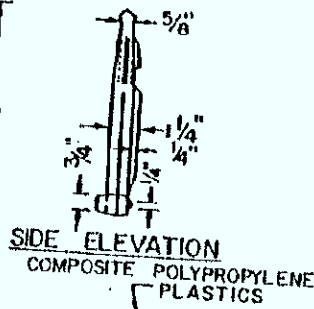
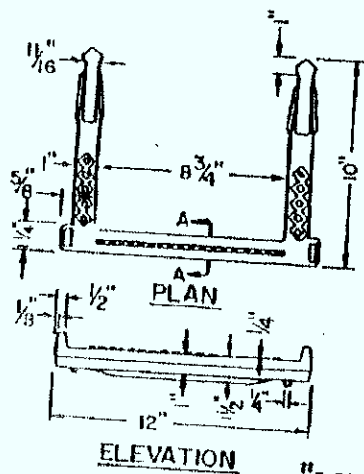
STD. NO.	REV.
2511	

NOTE: ALL STEPS SHALL PROT

4" FROM INSIDE FACE OF STRUCTURAL WALL



NOTE: STEPS DIFFERING IN DIMENSIONS, CONFIGURATIONS, OR MATERIALS FROM THOSE SHOWN MAY ALSO BE USED PROVIDED THE CONTRACTOR HAS FURNISHED THE CITY WITH DETAILS OF THE PROPOSED STEPS AND HAS RECEIVED WRITTEN APPROVAL FROM THE CITY FOR THE USE OF SUCH STEPS.



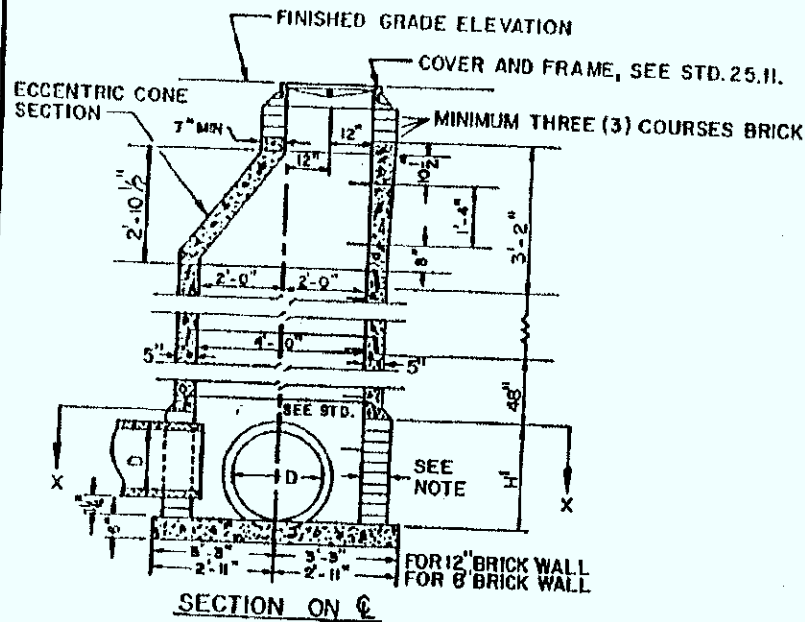
NO.		DATE		REVISIONS	
				DESCRIPTION	

NOTE: NOT TO BE USED IN SANITARY SEWER MANHOLE.
APPROVED: DATE May 8, 1980

STANDARD STEPS

CITY OF GREENVILLE, N.C. - ENGINEERING DEPT. Item # 13

STD. NO. REV.



GENERAL NOTES:

ALL MORTAR JOINTS TO BE 1/2" - 1/8". CONCRETE TO BE CLASS "A" FOR BASE FORMS ARE TO BE USED FOR CONSTRUCTION OF THE BASE.

BRICK:

~~PRECAST MANHOLE COMPONENTS SHALL MEET REQUIREMENTS OF ASTM-C-478.~~

FOR MANHOLES OVER 12 FT. VERTICAL WALL DEPTH, BRICK MASONRY WALL THICKNESS SHALL BE 12".

FOR MANHOLES WITH A VERTICAL WALL DEPTH LESS THAN 12 FT., BRICK MASONRY WALL THICKNESS SHALL BE 8".

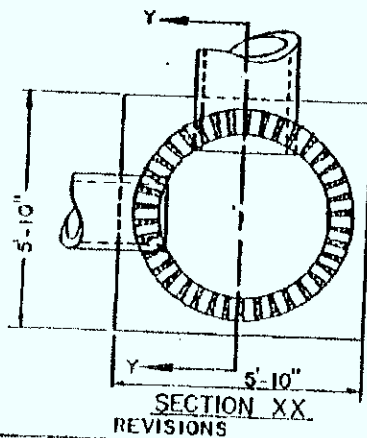
MANHOLES OVER 3'-6" IN DEPTH SHALL BE PROVIDED WITH STEPS 1'-0" ON CENTERS.

STEPS TO BE IN ACCORDANCE WITH STD. NO. 25.12.

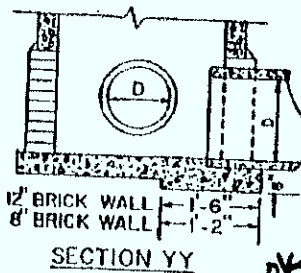
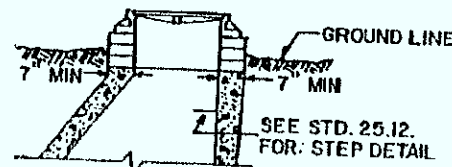
~~PRECAST SECTIONS MAY BE USED FOR ALL SECTIONS.~~

~~ADD~~

Engineered pre-cast boxes are permitted with the City Engineer's approval.

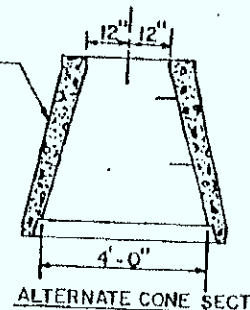


NO.	DATE	DESCRIPTION



DIMENSIONS	
PIPE DIAM.	BRICK HEIGHT
15"	1'-8"
18"	1'-11"
24"	2'-6"
30"	3'-0"
36"	3'-7"
42"	4'-2"

CONCENTRIC CONE SECTION



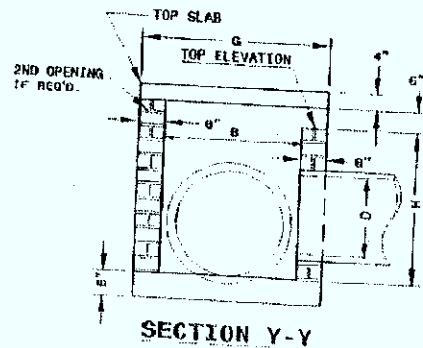
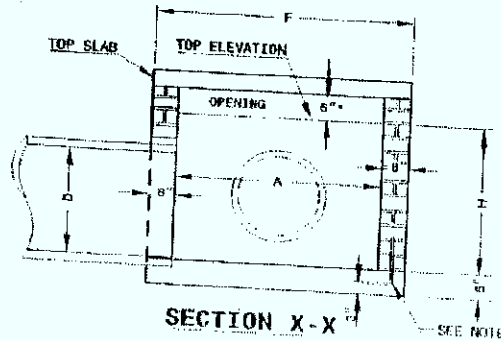
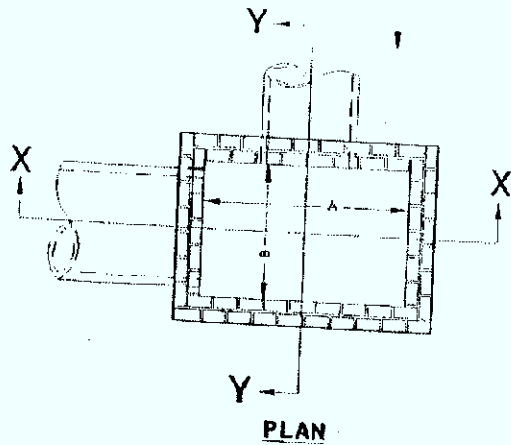
STANDARD ~~PRECAST~~ PIPE MANHOLE
15" THRU 42" PIPE

APPROVED: DATE May 8, 1980

CITY OF GREENVILLE, N.C. - ENGINEERING DEPT.

STD. NO.	REV.
25.11	

BRICK OPEN THROAT CATCH BASIN
15" THRU 48" PIPE



- NOTES: MORTAR JOINTS $\frac{1}{2}$ " \times $\frac{1}{4}$ " THICK.
 USE CLASS ~~X~~ CONCRETE THROUGHOUT.
 USE FORMS FOR CONSTRUCTION OF THE BOTTOM SLAB.
 USE #4 BAR DOWELS AT 12" CENTERS.
 DEDUCT FOR PIPE(S) FROM TOTAL CU. YDS. OF BRICK MASONRY.
 PROVIDE ALL CATCH BASINS OVER 3' 6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840,66.
 CONCAVE TOOL ALL EXPOSED MORTAR JOINTS. NO. 7512
~~USE BRICK OR CONCRETE BLOCK WHICH COMPLY WITH THE REQUIREMENTS OF SECTION 840 OF THE STANDARD SPECIFICATIONS.~~
 IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840,66.
 FOR 8'-0" IN HEIGHT OR LESS USE 6" WALLS AND BOTTOM SLAB. OVER 8'-0" TO 16'-0" IN HEIGHT USE 8" WALLS AND BOTTOM SLAB. ADJUST QUANTITIES ACCORDINGLY.
 CONSTRUCT WITH PIPE CROWNS MATCHING.
 CHAMFER ALL EXPOSED CORNERS 1".
 DRAWING NOT TO SCALE.
 * INCREASE THE SIZE OF THE 6" OPENING TO 8" MAX., AS DIRECTED BY THE ENGINEER BY ADDING 2" TO THE WALL HEIGHT ABOVE THE TOP ELEVATION. ADJUST QUANTITIES ACCORDINGLY.

Engineered pre-cast boxes are permitted with the City Engineer's approval. **ADD**

Concrete brick may be used in lieu of clay brick. Jumbo brick will be permitted. **ADD**

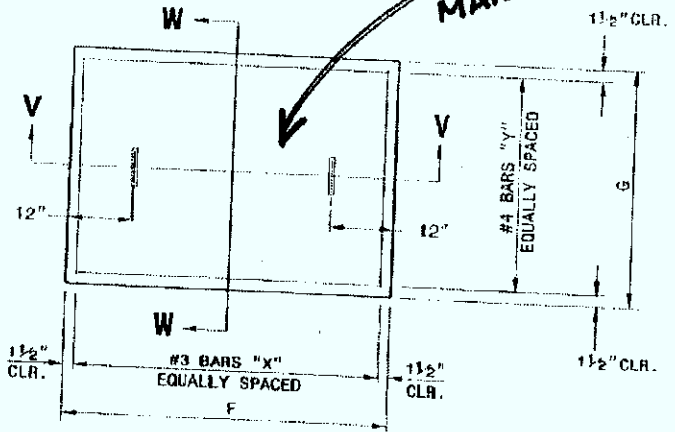
BRICK OPEN THROAT CATCH BASIN
15" THRU 48" PIPE

DIM'S OF BOX & PIPE				MIN. DIMENSIONS AND QUANTITIES FOR CATCH BASIN (BASED ON MIN. HEIGHT, #)														
PIPE D	SPAN A	WIDTH B	HEIGHT P	REINFORCING			SLAB DIMENSIONS		CU. YDS. CONC. IN BOX			TOTAL BRICK MASONRY		DEDUCTION CONC. PIPE		DEG. ORF 6" THROAT OPENING CU. YDS.		
				NO.	LENGTH	NO. (DEPTH)	I	R	TOP SLAB	BOT. SLAB	TOTAL	PER FT. H	MI. FOR H	C.S.	N.C.			
12"	3'-6"	2'-3"	1'-10"	5	3'-4"	7	4'-7"	28	4'-10"	3'-7"	0.214	0.321	0.535	0.360	0.656	0.020	0.087	0.043
15"	3'-6"	2'-3"	2'-1"	5	3'-4"	7	4'-7"	28	4'-10"	3'-7"	0.214	0.321	0.535	0.350	0.711	0.031	0.059	0.043
18"	4'-0"	2'-8"	2'-4"	6	3'-9"	8	5'-1"	36	5'-4"	4'-0"	0.263	0.305	0.658	0.395	0.938	0.041	0.081	0.049
21"	4'-0"	2'-8"	2'-10"	6	3'-9"	8	5'-1"	36	5'-4"	4'-0"	0.263	0.305	0.658	0.395	1.136	0.078	0.134	0.049
30"	4'-0"	3'-6"	3'-4"	6	4'-7"	10	5'-1"	44	5'-4"	4'-10"	0.318	0.477	0.795	0.436	1.472	0.122	0.199	0.049
36"	4'-6"	4'-0"	3'-10"	6	5'-1"	11	5'-7"	52	5'-10"	5'-4"	0.384	0.570	0.960	0.485	1.879	0.175	0.270	0.056
42"	5'-0"	4'-6"	4'-4"	6	5'-7"	13	6'-1"	65	6'-4"	5'-10"	0.456	0.654	1.140	0.535	2.340	0.248	0.371	0.062
48"	5'-0"	5'-0"	4'-10"	6	6'-1"	14	6'-1"	71	6'-4"	6'-4"	0.495	0.743	1.238	0.559	2.725	0.313	0.476	0.062

SHEET 1 OF 2

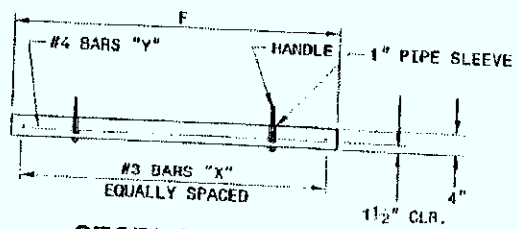
SHEET 1 OF 2

ADD MANHOLE

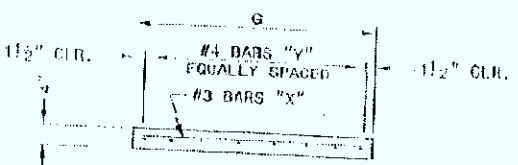


PLAN

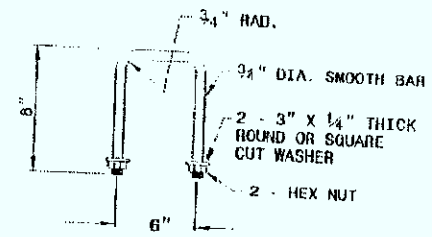
PRECAST OR CAST IN PLACE TOP SLAB



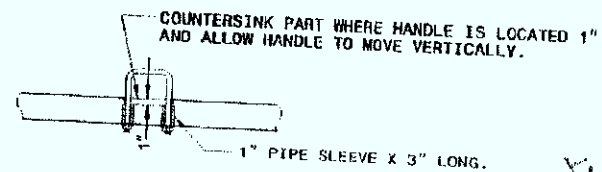
SECTION V-V



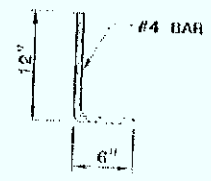
SECTION W-W



DETAIL OF HANDLE



PART SECTION THRU COVER SHOWING HANDLE



DOWEL

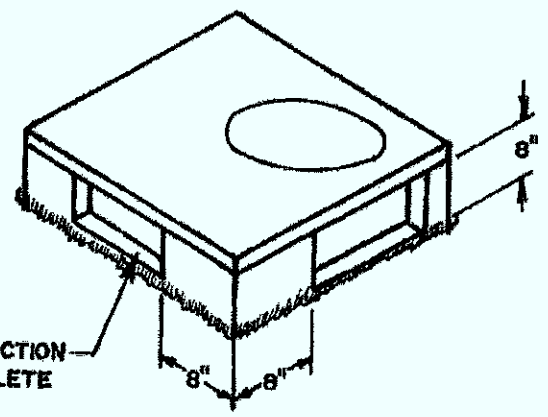
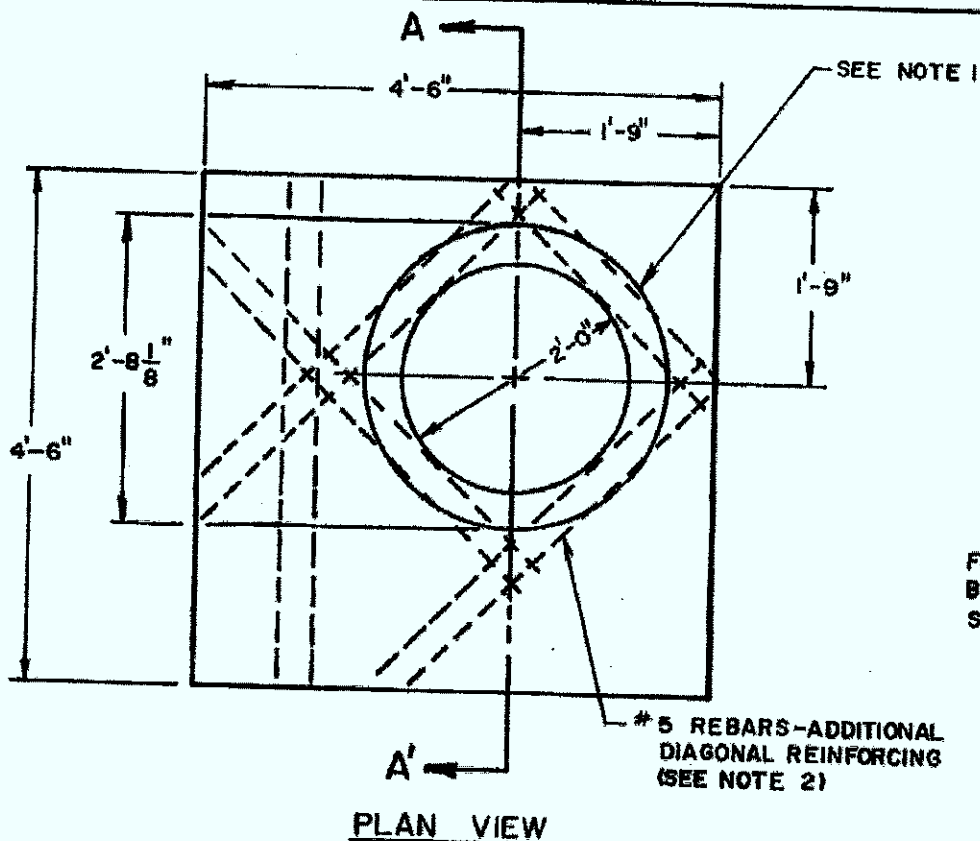
BRICK CATCH BASIN WITH 1 1/2" THRU 48" PIPE

OPEN TYPICAL

BRICK CATCH BASIN

1 1/2" THRU 48" PIPE

ENGINEERING DEPARTMENT
STANDARD DETAILS



ISOMETRIC VIEW

PLAN VIEW

#5 REBARS-ADDITIONAL DIAGONAL REINFORCING (SEE NOTE 2)

NOTES:

1. ~~SHOWN WITH EAST JORDAN IRON WORKS FLUSH MOUNT MANHOLE FOR USE WITH ALL YARD INLETS & AS AN ALTERNATE FOR JUNCTION BOXES IN SIDEWALKS OR YARD AREAS ONLY. FOR ALL OTHER JUNCTION BOXES USE MANHOLES SPECIFIED IN STD. DET. SD 40, GROUT AS SHOWN.~~
2. COVER TO BE 4000 PSI CONCRETE WITH #5 REBAR @ 6" O.C. EACH WAY.
3. SEE STANDARD DETAIL ~~SD 2A~~ FOR SECTION A-A'.

CONCRETE COVER

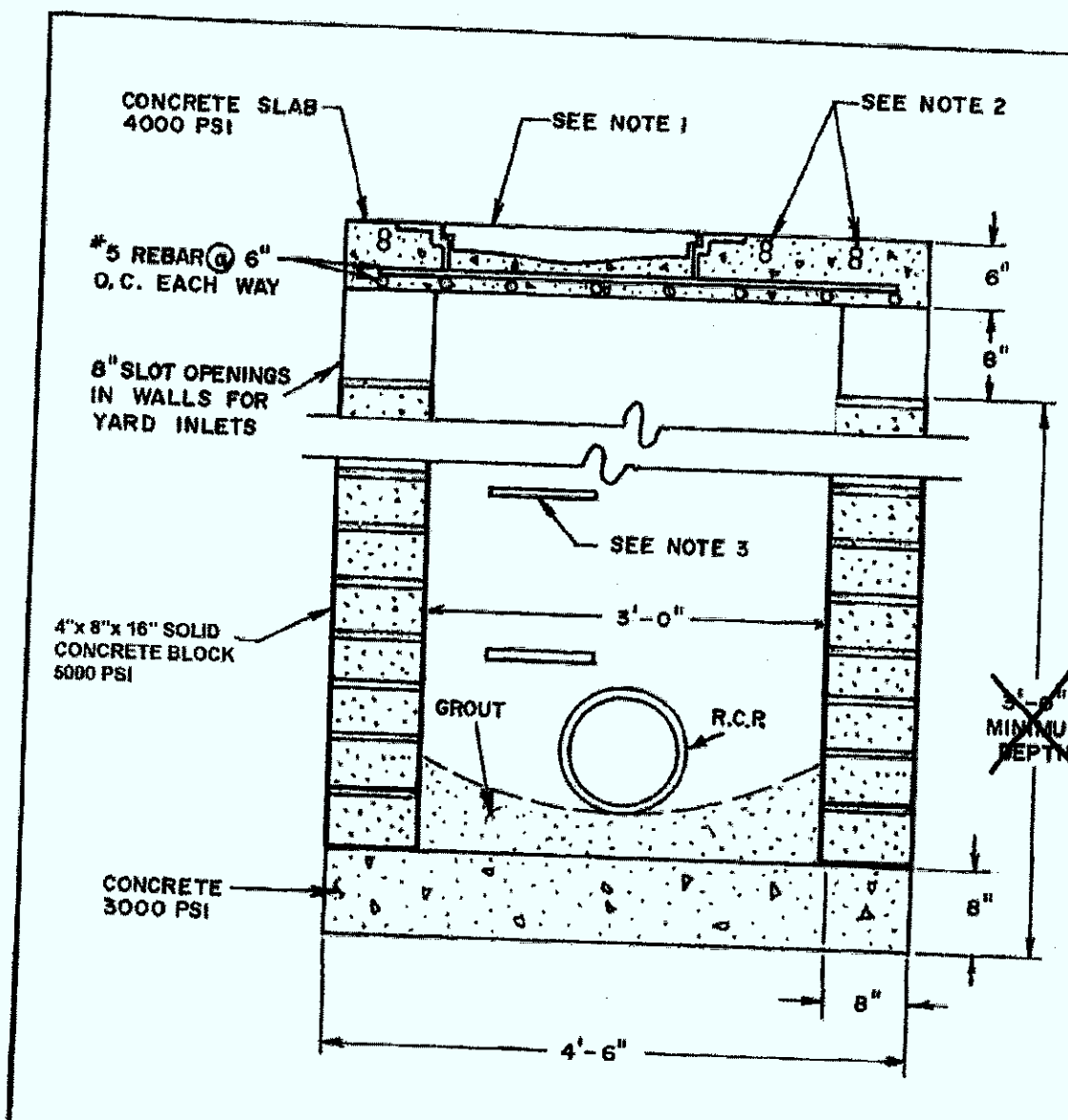
NO SCALE

TITLE
 OPEN THROAT
 YARD INLET/
 JUNCTION BOX

REVISIONS		
NO	DATE	BY

DET.NO.

ENGINEERING DEPARTMENT
STANDARD DETAILS



NOTES:

1. ~~EAST JORDAN IRON WORKS FLUSH MOUNT MANHOLE & MH RING. SEE STD. DETAIL 99-407~~
2. #5 REBAR PLACED DIAGONALLY AROUND MANHOLE RING. SEE STD. DET. 99-27
3. ~~MANHOLE STEPS @ 15" O.C. 1st STEP IS 2'-0" FROM TOP.~~
4. ~~THIS DETAIL MAY BE USED AS AN ALTERNATE FOR JUNCTION BOXES IN SIDEWALK OR YARD AREAS ONLY.~~
5. Provide all yard inlets over 3'-6" in depth with steps 12" on center. Use steps which comply with STD. NO. 25.12.

SECTION A-A'

NO SCALE

TITLE OPEN THROAT YARD INLET-	REVISIONS			DET. NO.
	NO	DATE	BY	

ADD : Engineered precast boxes are permitted with the City Engineer's approval.

ADD : Clay brick may be used in lieu of concrete brick. Jumbo brick will be permitted. Item #3

CONSTRUCTION PLAN PREPARATION

Item # 13

CONSTRUCTION PLAN PREPARATION

CONSTRUCTION PLAN REQUIREMENTS

A. FORMAT

1. Provide cover sheet at scale of 1" = 100' or larger. Use same scale as preliminary plat.
2. Construction plans to be scale 1" = 50' or larger.
3. Size shall be 24" x 36" or 30" x 42". Use same size as preliminary plat.
4. Boundary lines shall be distinctly and accurately represented, all bearing and distances shown with an accuracy of closure of not less than one (1) in 10,000+ and in accordance with the Standards of Practice for Land Surveying in North Carolina.
5. Elevation and bench markers shall be referenced to NAVD 88.
6. All drawings shall be prepared and sealed by a professional engineer and/or land surveyor.
7. Multiple sheets shall be collated and stapled. Match lines shall be clearly indicated.
8. (a) Two (2) paper copies at the time of original submission for department review.
(b) Two (2) copies shall be submitted following a request for revisions.
(c) One (1) copy of the approved plan.
9. Profiles shall be drawn at a scale of not less than one (1) inch equals fifty (50) feet, horizontal, and one (1) inch equals 5 (five) feet, vertical.

B. GENERAL INFORMATION (COVER SHEET AND PLAN AND PROFILE SHEETS)

1. Subdivision name.
2. The name(s) of the city, township, county, and state in which the subdivision is located.
3. Name, address, and telephone number of land owner(s).
4. Name, address, and telephone number of the subdivider and/or developer.
5. Name, address, telephone number, and license number of the engineer preparing the plat.

6. North Carolina registration number and seal as listed per five (5) above.

C. PLAN INFORMATION

I. Cover Sheet

1. The cover or title sheet shall be in accordance with Section 9-5-45 of the City Code.

II. Plan and Profile Sheets

1. North arrow and delineation as to whether true, grid or magnetic including date.
2. Existing, platted and proposed streets, their names and numbers (if state marked routes), right of way and/or easement widths, pavement widths, tangent distance between reverse curves, centerline curve and corner radius data, including sight distance triangle and typical cross sections.
3. Proposed and existing lot lines within the subdivision showing approximate dimensions.
4. Proposed and existing property lines
5. Proposed and existing water courses, streams, or ditches including centerline elevations, cross sections, and other pertinent data.
6. Floodplain boundaries, flood hazard area designation, floodway boundaries, and designation, including base flood elevations and FIRM panel reference.
7. Elevation of proposed and existing ground surface at all street intersections and points of major change along centerline of streets, together with proposed grade lines connecting therewith.
8. The profile of each proposed street shall show clearly and accurately the mathematical relation of the established new street grades and their relation to the existing street grades with which they connect.
9. The profiles shall show the finished elevation of the top of curb or street centerline for non-curb and gutter street sections.
10. The profiles of each street shall contain at least one (1) typical section, indicating the particular section to which the established profile grade refers. Each profile shall show the percentage of grade, the length of vertical curve,

the P.V.C. and the P.V.T. Station, the P.V.I. Station, elevation, and midordinate.

11. The profiles of each storm sewer and sanitary sewer system shall contain the percentage of grade and the top and invert elevation of each catch basin and manhole.

D. SUPPORTING TECHNICAL INFORMATION

1. All storm drainage design shall be in accordance with Section 9-9 of the City Code and Series 15 of this manual.
2. Charts SD-8 (Catch Basin Design Data Sheet) and SD-9 (Storm Drainage Design Data Sheet) shall be required.

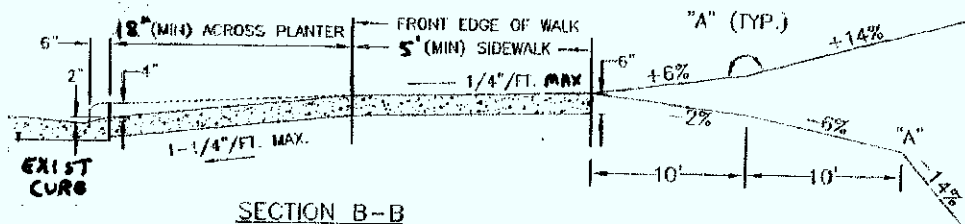
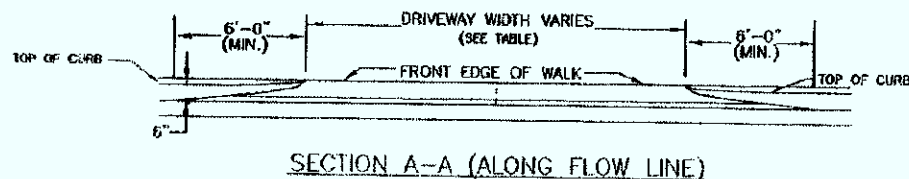
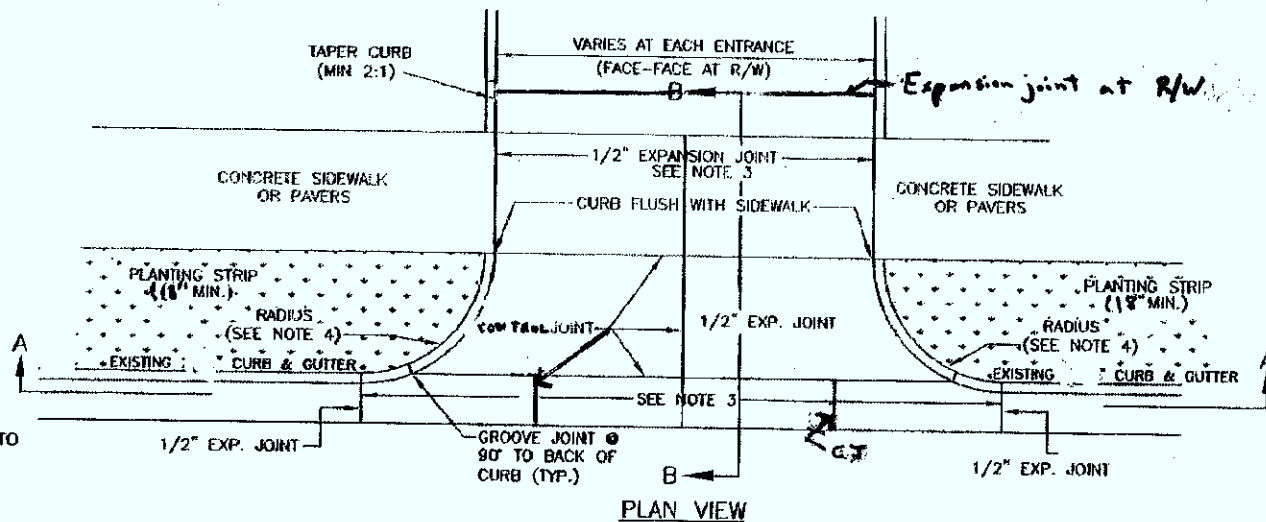
DRIVEWAYS

Item # 13

DRIVEWAY DIMENSIONS		
OPERATION/RADIUS	MINIMUM	MAXIMUM
ONE-WAY	12'	18'
TWO-WAY WITH	24'	36'

NOTES:

1. ALL CONCRETE TO BE 3000 P.S.I. COMPRESSIVE STRENGTH.
2. AT ALL DRIVEWAYS, SIDEWALKS TO BE REMOVED TO THE NEAREST JOINT BEYOND NEW CONSTRUCTION OR CUT WITH A SAW AND REMOVED. SAW CUT OR JOINT TO BE PERPENDICULAR TO EDGE OF EXISTING PAVEMENT.
3. ALL DRIVEWAYS MUST MEET THE CURRENT CITY DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE, AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.
4. RADIUS MUST BE MINIMUM 5' FEET OR THE WIDTH OF THE PLANTING STRIP, WHICHEVER IS GREATER.
5. PAVERS USED IN DRIVEWAY MUST HAVE A THICKNESS OF 3 INCHES.
6. ALGEBRAIC DIFFERENCE IN GRADE ("A") BETWEEN SLOPES SHALL BE 8% OR LESS.
7. SPECIAL CONDITIONS MAY WARRANT EXCEPTIONS TO THIS DETAIL. SUBJECT TO APPROVAL BY CITY ENGINEER.



NOT TO SCALE

APPROVED DATE _____

TYPICAL CONCRETE DRIVEWAY DETAIL
(COMMERCIAL, INDUSTRIAL, INSTITUTIONAL, MULTIFAMILY)

SHEET NO. _____ REV. _____

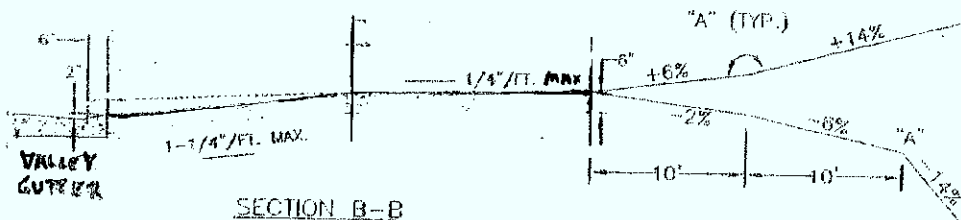
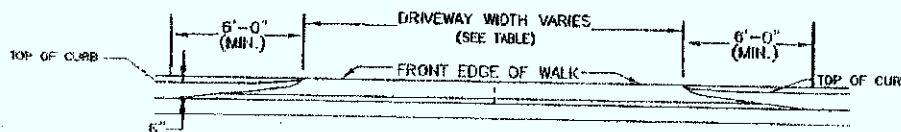
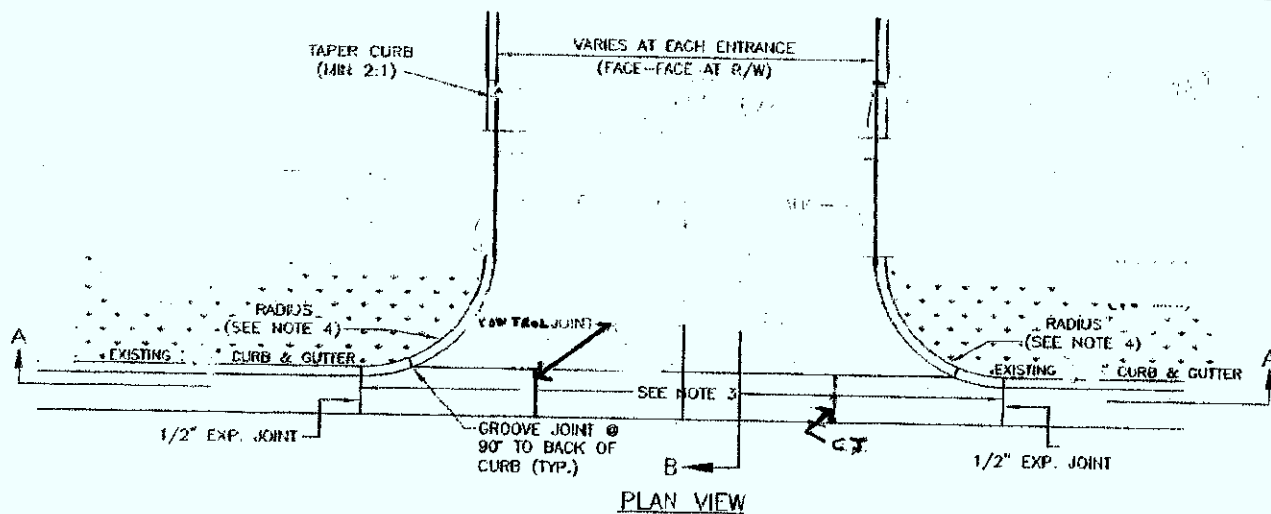
DRIVEWAY DIMENSIONS		
OPERATION/RADIUS	MINIMUM	MAXIMUM
ONE-WAY	12'	18'
TWO-WAY WITH	24'	36'

NOTES:

1. ALL DRIVEWAYS MUST MEET THE CURRENT CITY DRIVEWAY REGULATIONS AND NCDOT REQUIREMENTS FOR SPACING, SIGHT DISTANCE, AND OFFSETS FROM PROPERTY LINES AND INTERSECTIONS.

2. ALGEBRAIC DIFFERENCE IN GRADE (%) BETWEEN SLOPES SHALL BE 8% OR LESS.

3. SPECIAL CONDITIONS MAY WARRANT EXCEPTIONS TO THIS DETAIL. SUBJECT TO APPROVAL BY CITY ENGINEER.

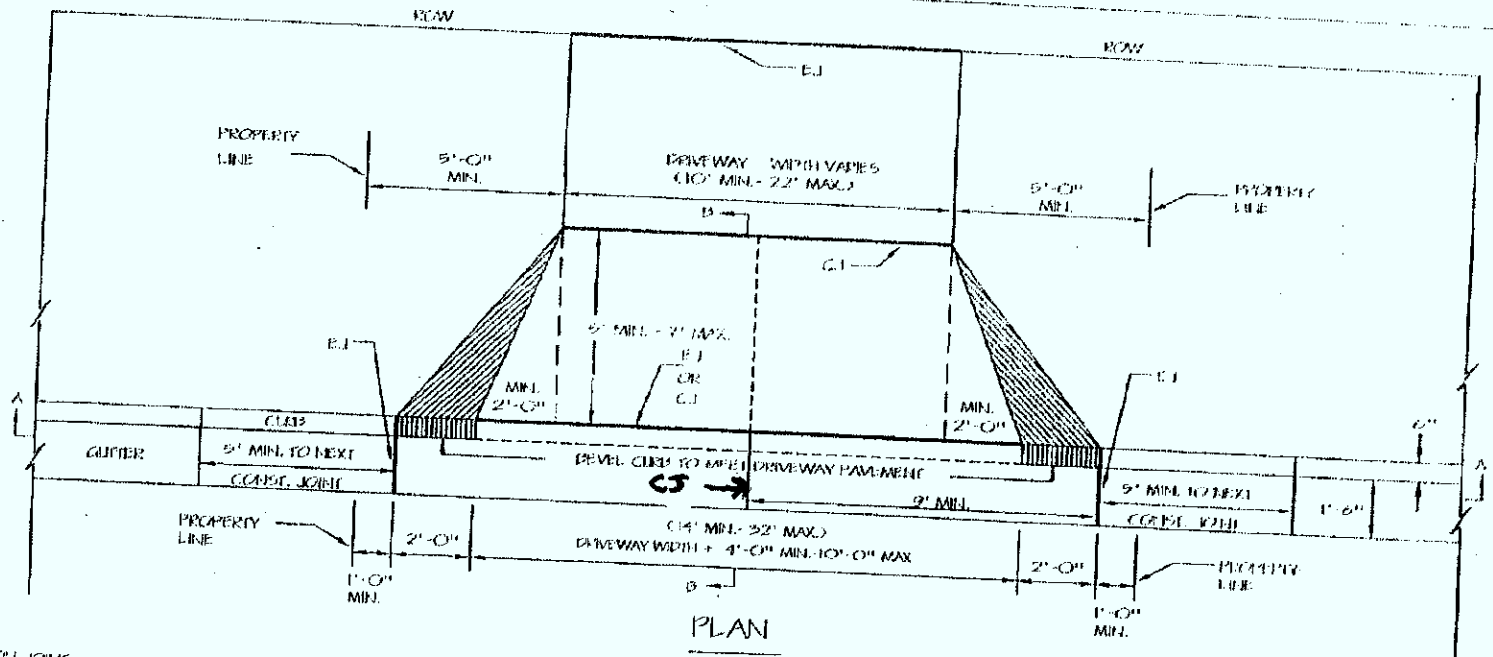


NOT TO SCALE

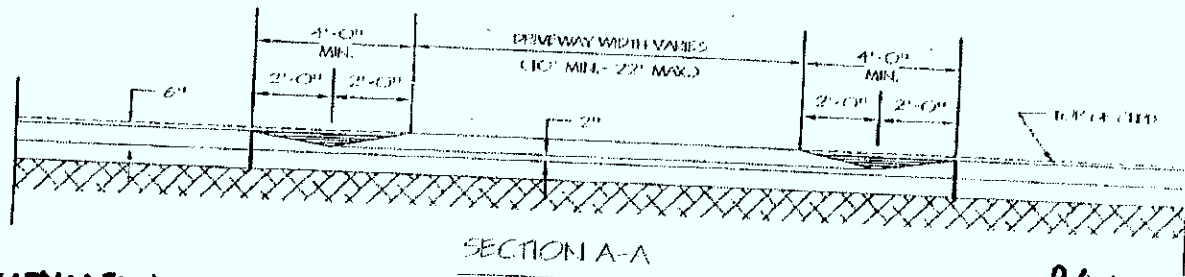
APPROVED DATE _____

TYPICAL ASPHALT DRIVEWAY DETAIL
(COMMERCIAL, INDUSTRIAL, INSTITUTIONAL, MULTIFAMILY)

SHEET NO. _____ REV. _____



EJ - EXPANSION JOINT
CJ - CONTROL JOINT



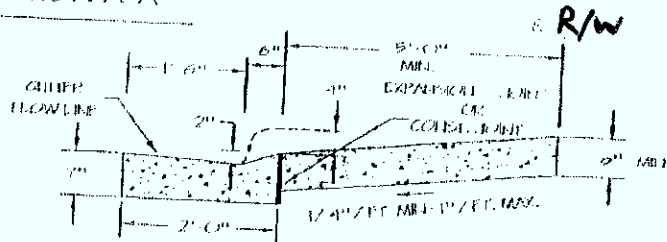
NOTE: GAVES ARE ALLOWED IN THIS INSTALLATION.

Filename: I:\cadd\model\SC01.dwg

NO.	DATE	DESCRIPTION
	04/28/98	REVISIONS
	01/10/98	REVISIONS
	06/10/99	REVISIONS

SCALE: 1" = 5'

SECTION B-B
(CHSS)



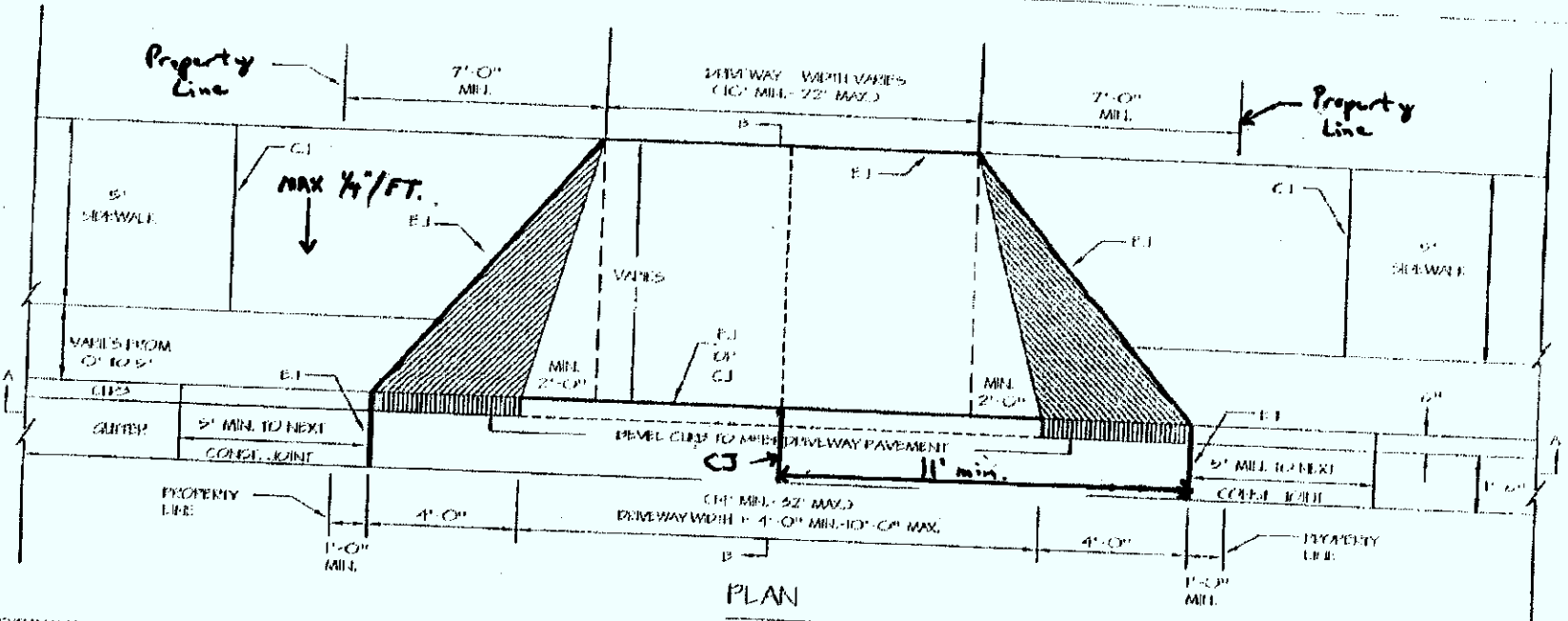
APPROVED DATE

SHE. NO.	REV.
0001	1

**RESIDENTIAL DRIVEWAY
WITH NO SIDEWALK**

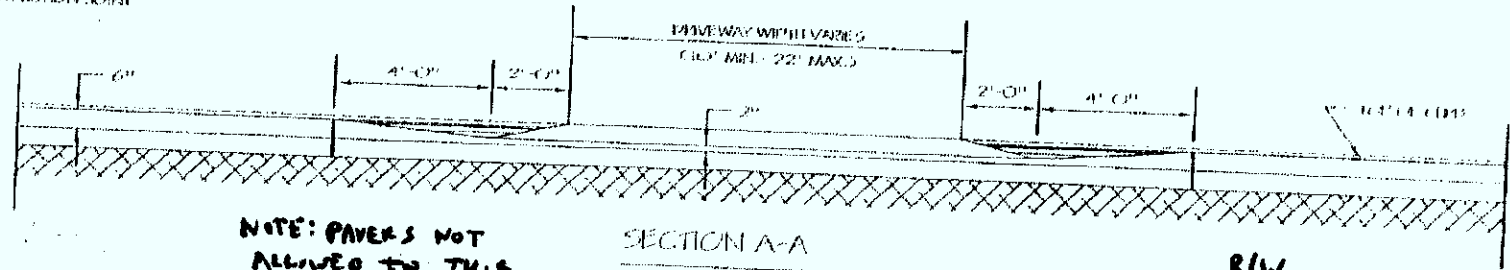
CITY OF GREENVILLE, N. C. ENGINEERING DIVISION

Per #13



PLAN

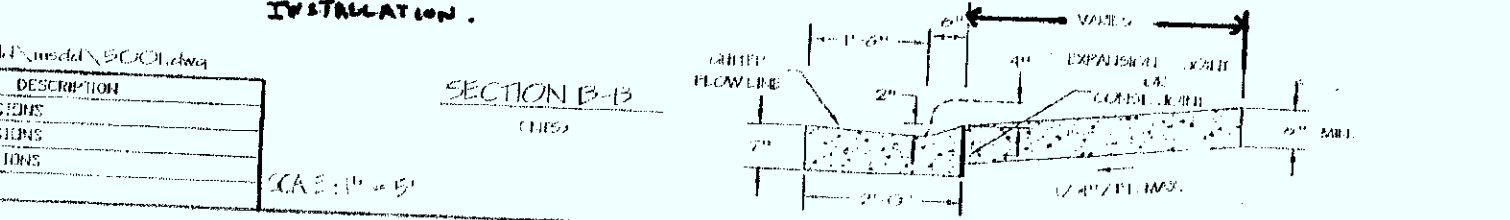
EJ - EXPANSION JOINT
CJ - CONSTRUCTION JOINT



SECTION A-A

R/W

NOTE: PAVES NOT ALLOWED IN THIS INSTALLATION.



SECTION B-B

SCALE: 1" = 5'

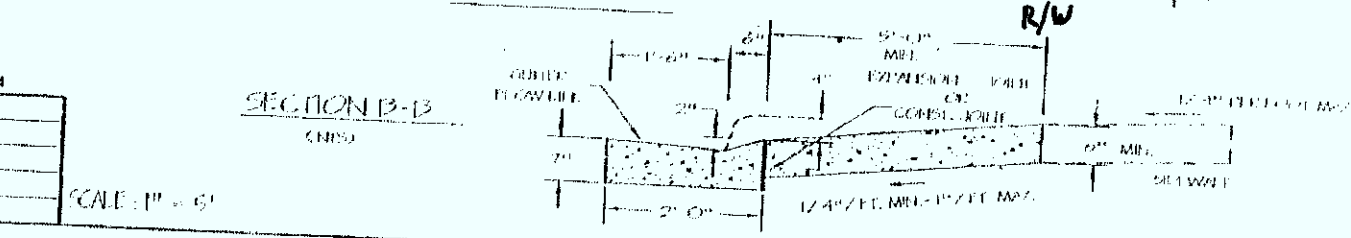
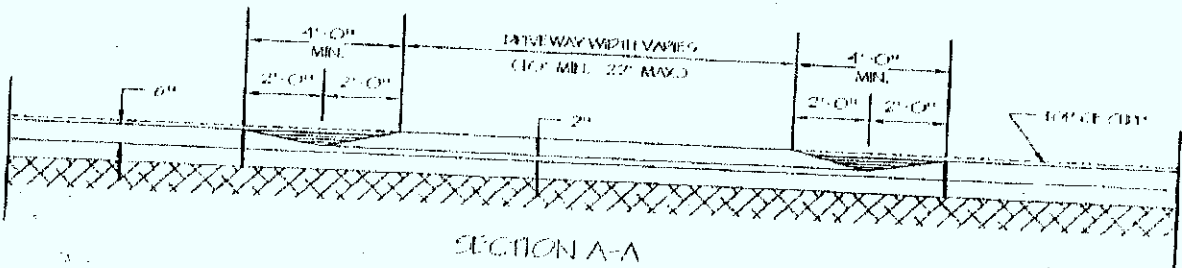
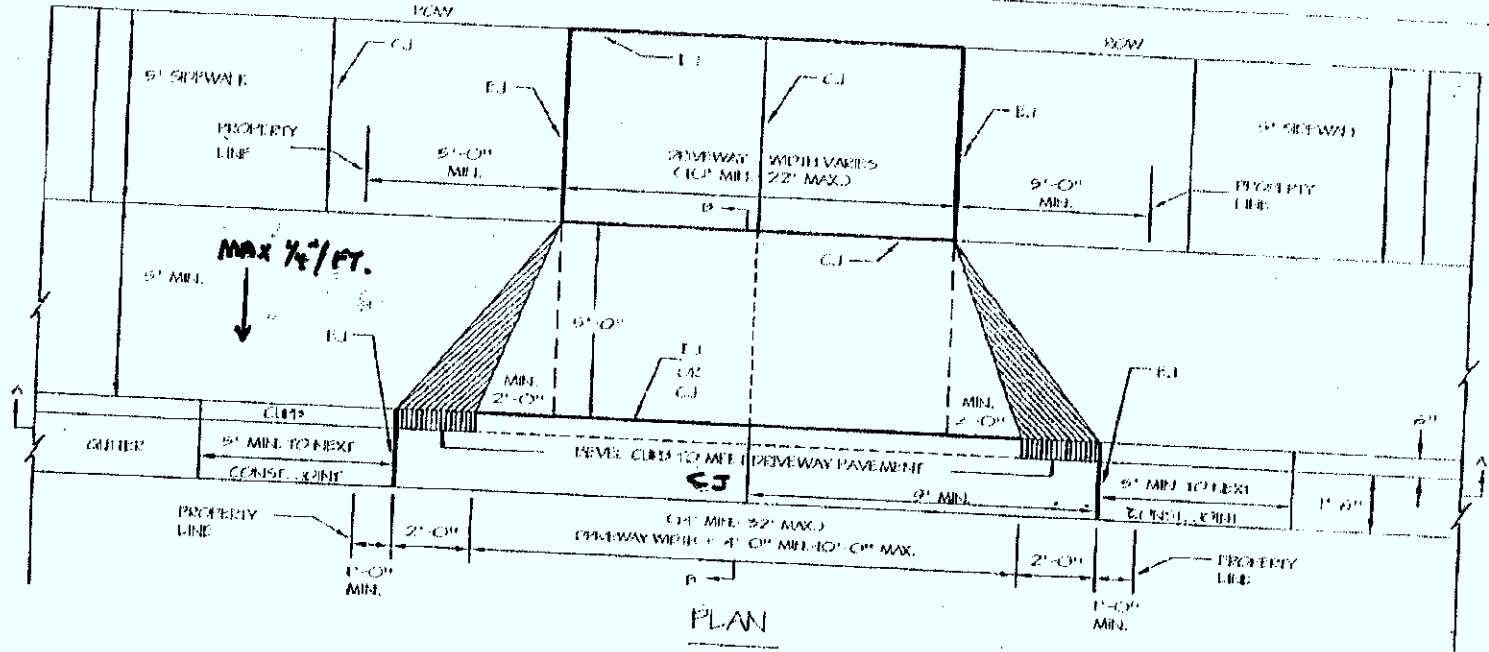
filename: E:\work\p\msdd\5001.dwg

NO.	DATE	DESCRIPTION
	04/28/98	REVISIONS
	11/10/98	REVISIONS
	08/10/99	REVISIONS

APPROVAL DATE

SD	HQ	REV
05/05/00	JA	1

RESIDENTIAL DRIVEWAY
WITH SIDEWALK WITHIN 5' OF CURB
CITY OF GREENVILLE, N. C. ENGINEERING DIVISION



E.I. - EXPANSION JOINT
C.I. - CONTROL JOINT

NOTE: PAVERS NOT ALLOWED IN THIS INSTALLATION.

File name: E:\cadd\resid\resid\SC01.dwg

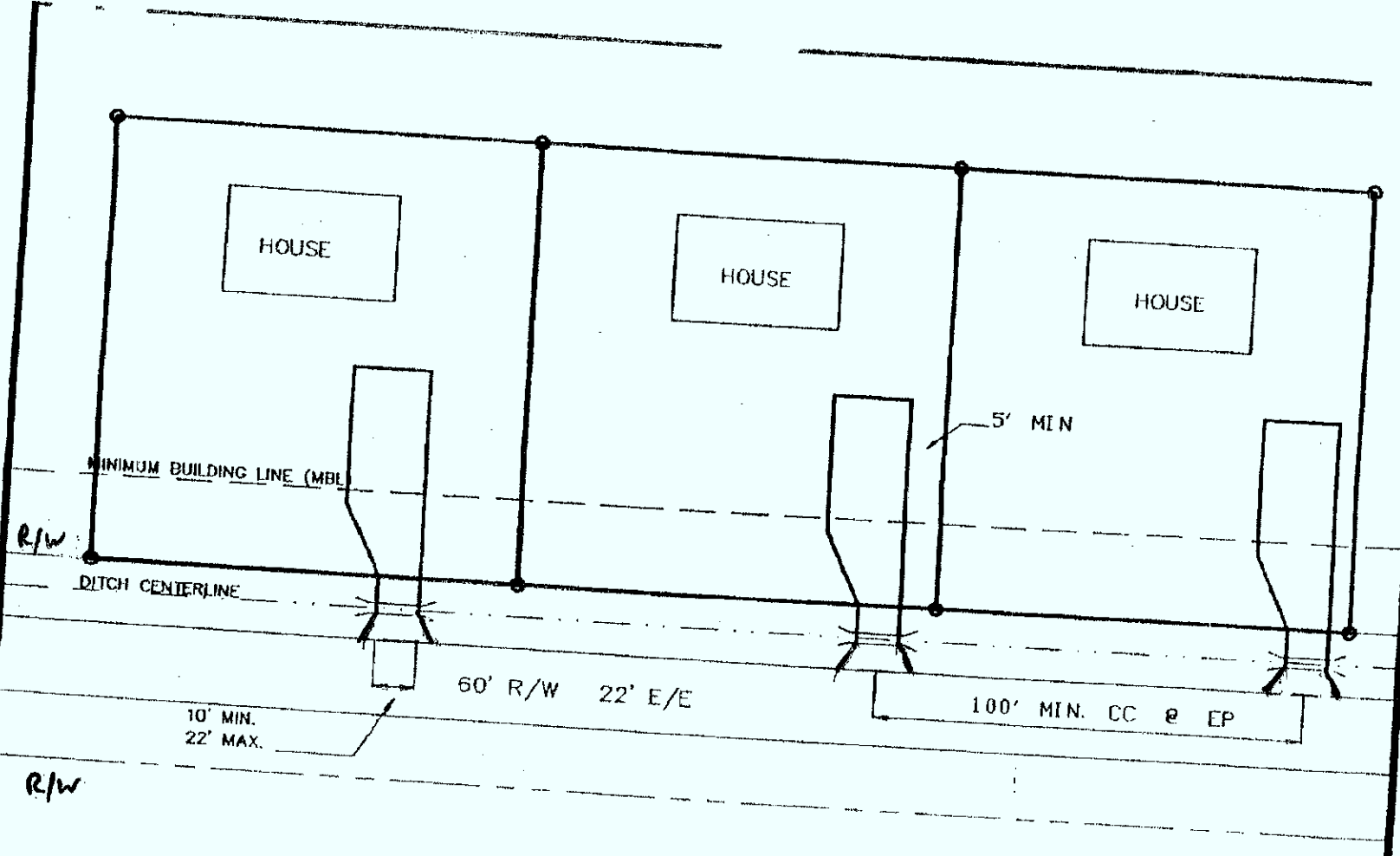
NO.	DATE	DESCRIPTION
	04/25/08	REVISIONS
	01/10/08	REVISIONS
	08/10/99	REVISIONS

SCALE: 1" = 6'

APPROVAL DATE

SECRET	REV.
06/015	1

RESIDENTIAL DRIVEWAY
WITH SIDEWALK GREATER THAN 5' FROM CURB
CITY OF GREENVILLE, N. C. ENGINEERING DIVISION



NO.	DATE	DESCRIPTION
	7/1/97	NEW STANDARD

NTS

DRIVEWAY SPACING DETAIL
(NON C&G STREET)

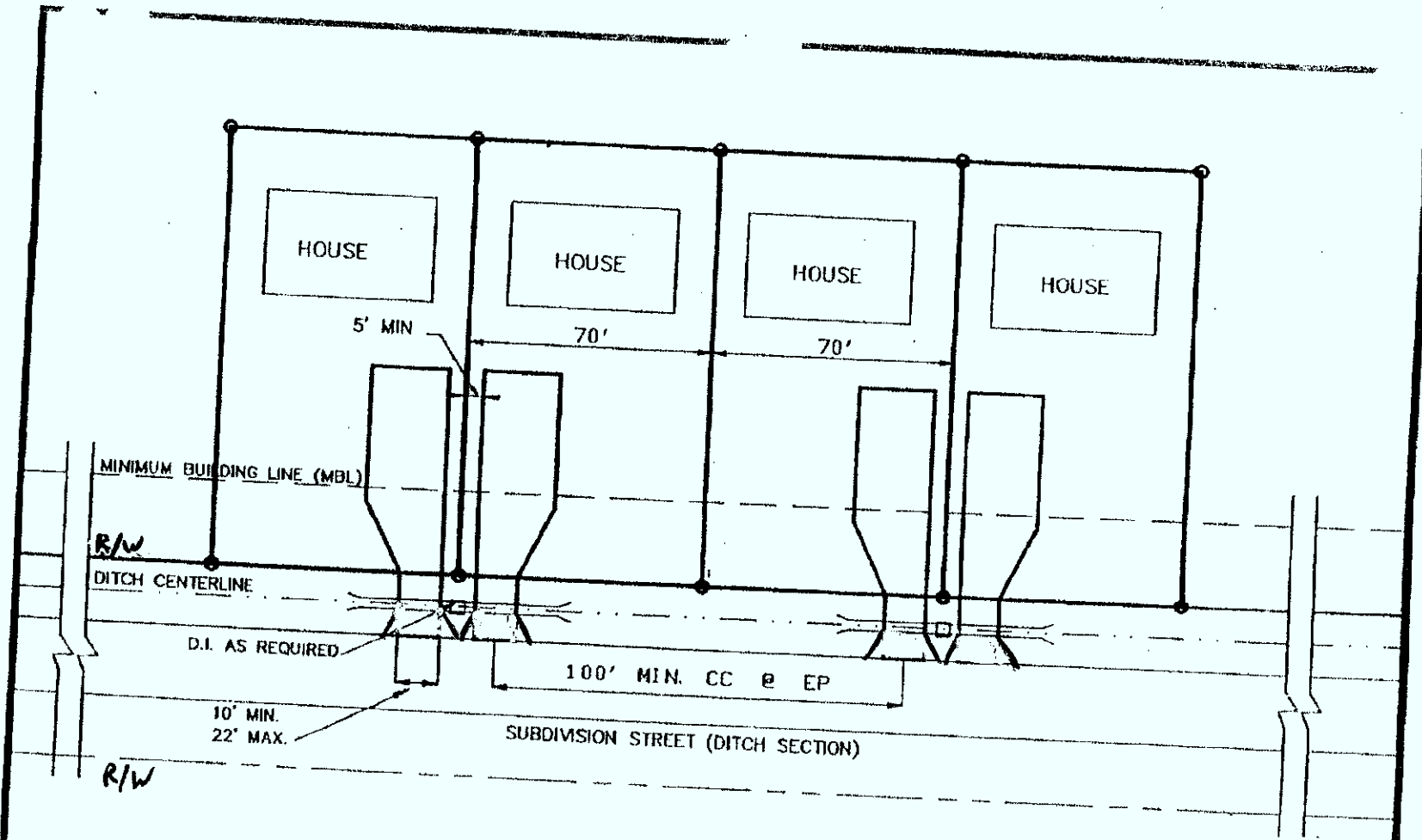
APPROVED DATE 7/1/97

CITY OF GREENVILLE, N. C. ENGINEERING DIVISION

H:\PROJ\MSDD\DWG\100DW

STD. NO.	REV.
50.09	

Item # 13



NO.	DATE	DESCRIPTION
	7/1/97	NEW STANDARD

NTS

APPROVED: DATE 7/1/97

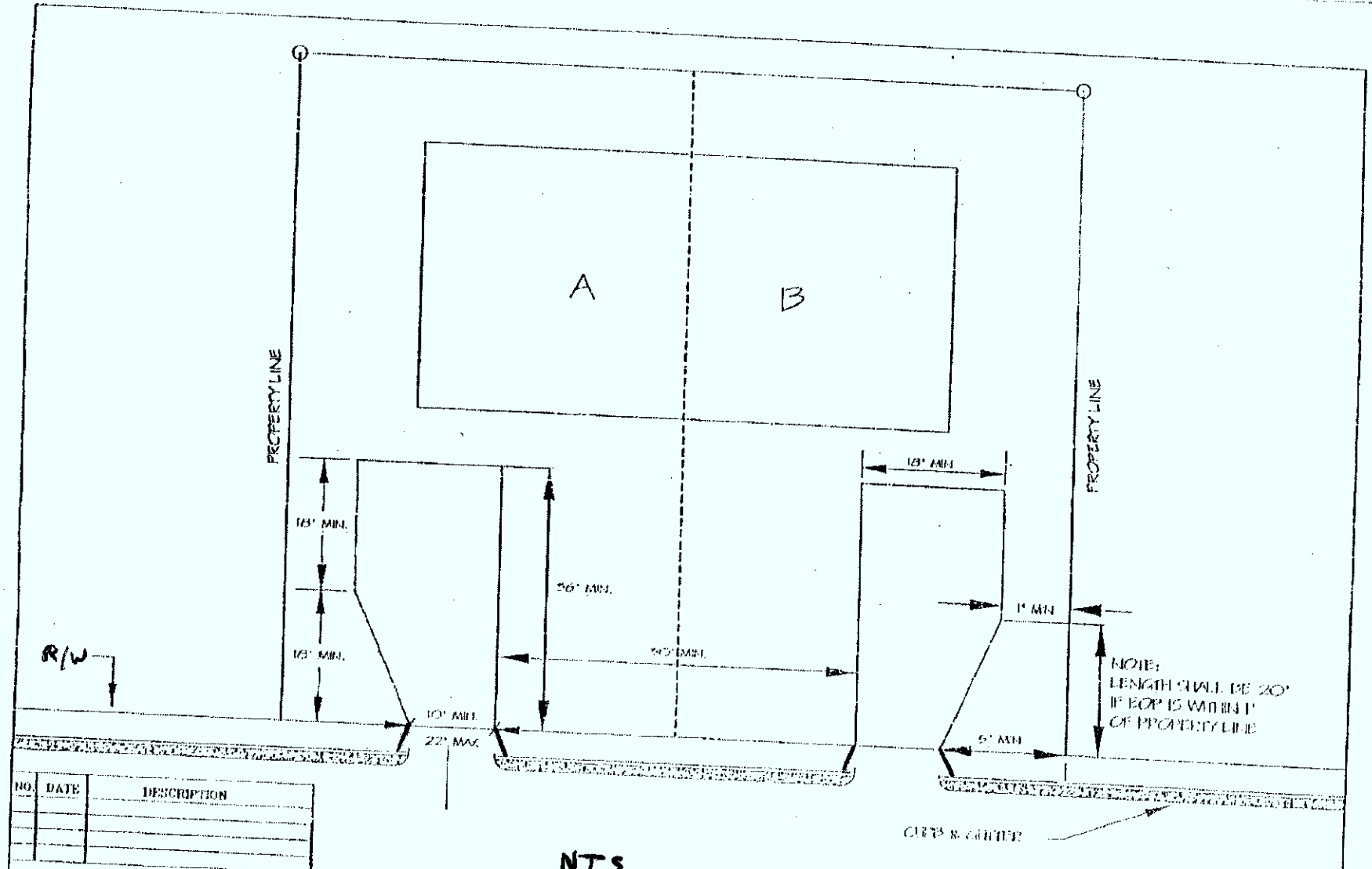
DRIVEWAY SPACING DETAIL
 (NON C&G STREET)
 SHARED CULVERT

CITY OF GREENVILLE, N. C. ENGINEERING DIVISION

H: \PROJ\MSDD\DWG\100DW

STD. FIG.	REV.
50.10	

Item # 13

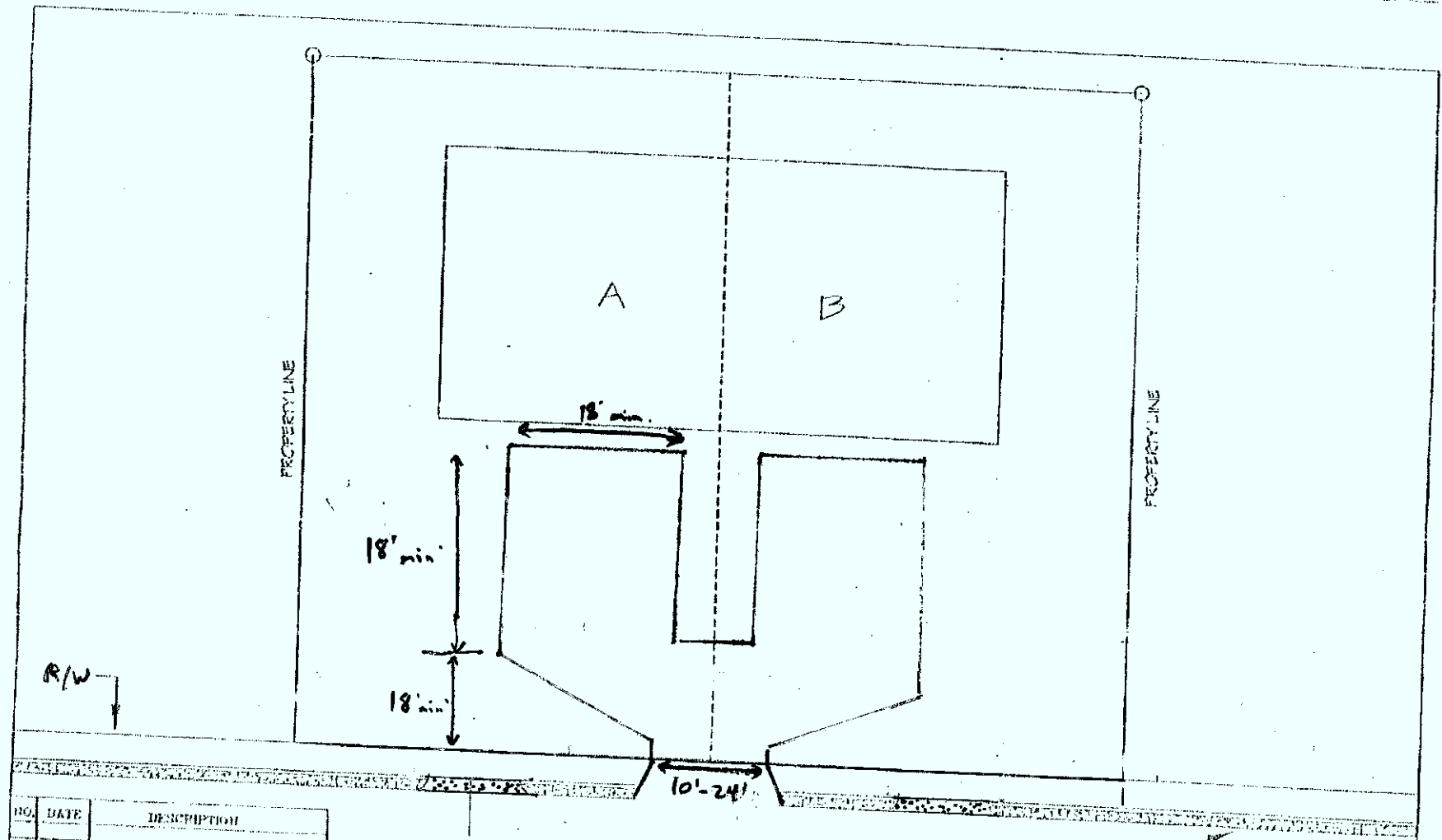


NTS

DUPLEX DRIVEWAY SPACING
CURB & GUTTER STREET

APPROVED DATE: _____
 SET NO. _____
 REV. _____

CITY OF GREENVILLE, N.C. ENGINEERING DIVISION



NO.	DATE	DESCRIPTION

NTS

SHARED DUPLEX DRIVEWAY

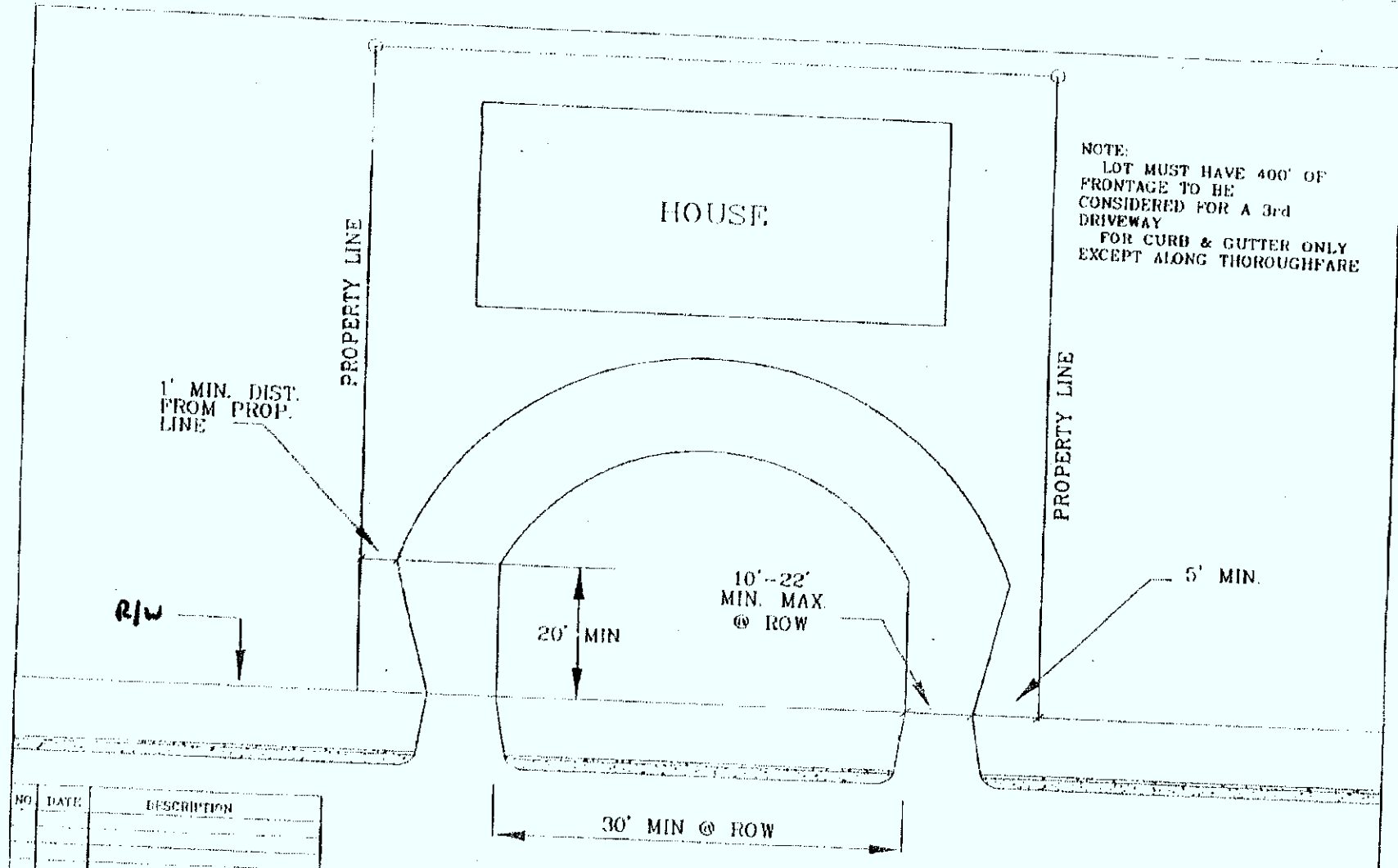
CLIB & GLITTER STREET

APPROVED DATE:

--

--

CITY OF GREENVILLE, N.C. ENGINEERING DIVISION



NOTE:
 LOT MUST HAVE 400' OF
 FRONTAGE TO BE
 CONSIDERED FOR A 3rd
 DRIVEWAY
 FOR CURB & GUTTER ONLY
 EXCEPT ALONG THOROUGHFARE

1' MIN. DIST.
 FROM PROP.
 LINE

R/W

20' MIN

10'-22'
 MIN. MAX
 @ ROW

5' MIN.

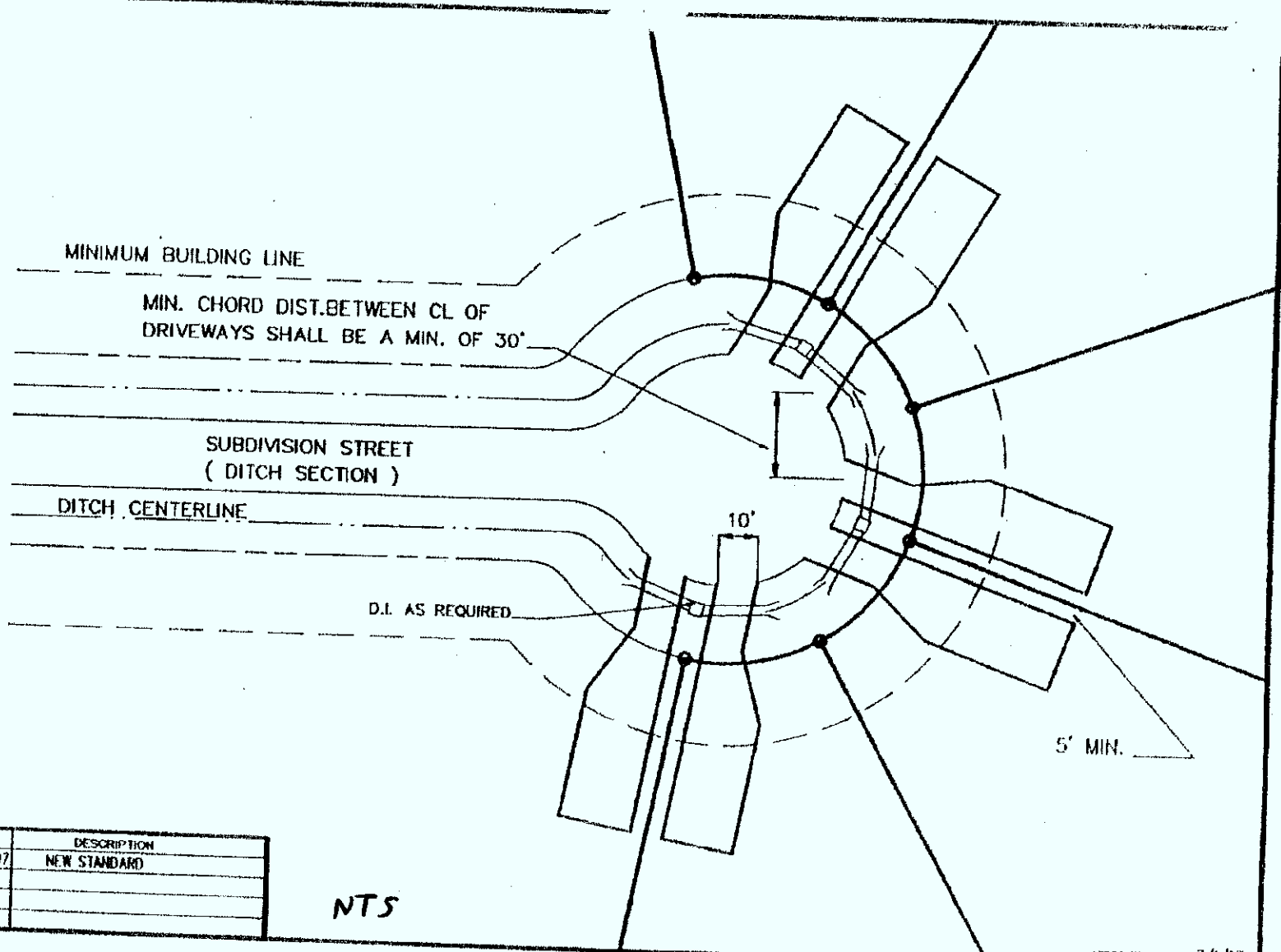
30' MIN @ ROW

NO.	DATE	DESCRIPTION

NTS

APPROVED DATE
 STD. NO. REV

CIRCULAR OR DUAL DRIVEWAYS
 FOR SINGLE FAMILY
 CITY OF GREENVILLE, N.C. ENGINEERING DIVISION



NO.	DATE	DESCRIPTION
	7/1/97	NEW STANDARD

NTS

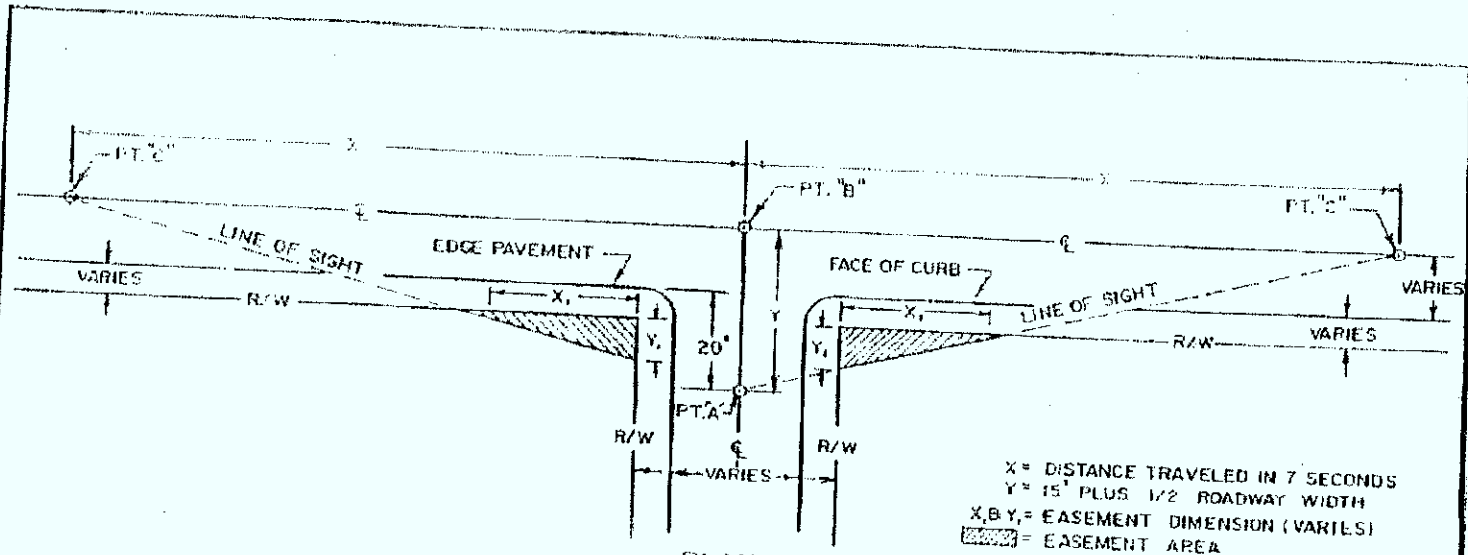
APPROVED DATE 7/1/97


DRIVEWAY SPACING DETAIL
 (NON C&G STREET)
 CUL-DE-SAC

CITY OF GREENVILLE, N. C. ENGINEERING DIVISION

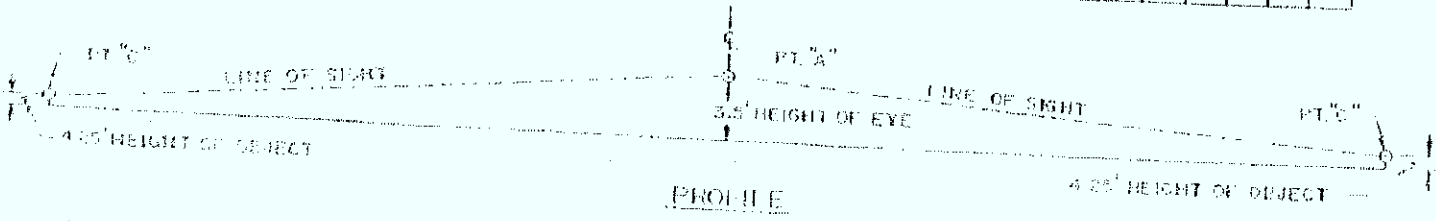
STR. NO.	REV.
50.11	

FE \PROJ\MSDD\DWG\100DW



X = DISTANCE TRAVELED IN 7 SECONDS
 Y = 15' PLUS 1/2 ROADWAY WIDTH
 X, Y = EASEMENT DIMENSION (VARIES)
 = EASEMENT AREA

SPEED (MPH)	20	25	30	35	40	45
X DISTANCE (FT)	206	257	308	360	411	462



PROFILE

NOTE - WHEN THE GRADES OF THE INTERSECTION LESS ARE OTHER THAN FLAT, CORRECTIONS SHOULD BE MADE TO SIGHT DISTANCE REQUIREMENTS AS OUTLINED BY A.A.S. (E.C.).

NO SCALE

TITLE : TYPICAL SIGHT DISTANCE EASEMENT FOR AT-GRADE INTERSECTION OF TWO ROADS		REVISIONS		DET. NO.
NO.	DATE	BY		

MINIMUM BUILDING LINE

SUBDIVISION STREET

SEE NOTE 1

1.) MIN. 3' FOR ROLL CURB & GUTTER
MIN. 5' FOR STANDARD CURB & GUTTER

1' MIN.
20' BACK OF R/W

NO.	DATE	DESCRIPTION
	7/1/97	NEW STANDARD

NTS

APPROVED DATE 7/1/97

DRIVEWAY SPACING DETAIL
(C&G STREET)
CUL-DE-SAC

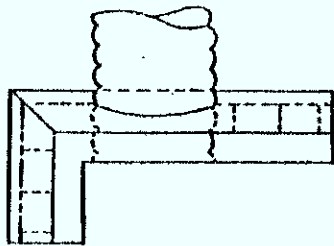
CITY OF GREENVILLE, N. C. ENGINEERING DIVISION

FILE: \PROJ\MSDB\DWG\100DW

SHEET NO.	REV.
50.11	

ENDWALLS

Item # 13



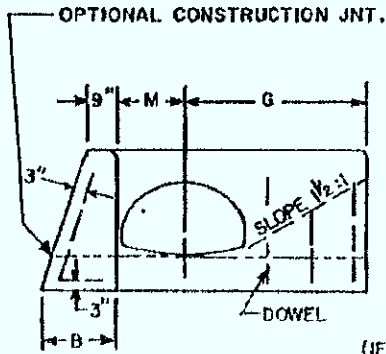
PLAN

GENERAL NOTES:

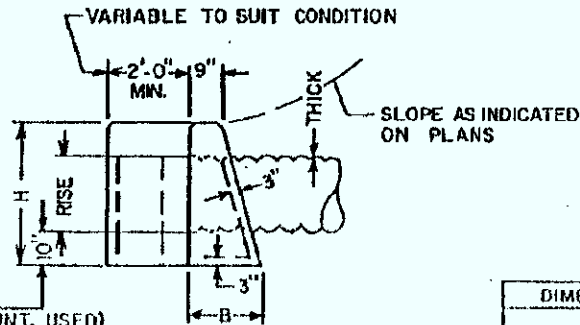
ALL CORNERS TO BE CHAMFERED 1".
 THE CONTRACTOR WILL BE REQUIRED TO PLACE 2-#6 BARS "Y" IN THE TOP OF ALL ENDWALLS FOR PIPE CULVERTS 42" AND OVER WITH A MINIMUM 3" COVER AND A LENGTH 6" LESS THAN ENDWALL.

IF CONTRACTOR ELECTS TO USE CONSTRUCTION JOINT AT BOTTOM OF PIPE, BAR "X" (DOWELS) SHALL BE IN THE BASE AS SHOWN ON PLANS. SPACING TO BE APPROXIMATELY 12" CENTERS UNLESS ENGINEER DIRECTS OTHERWISE.

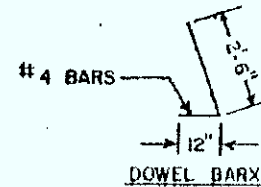
WHEN CONTRACTOR ELECTS TO USE CONSTRUCTION JOINT AT BOTTOM OF PIPE AND POURS BASE SEPARATELY, THE TOP OF THE BASE SHALL BE LEFT ROUGH.
 FORMS WILL BE USED IN CONSTRUCTION OF BOTTOM SLAB.
 CLASS "AA" CONCRETE SHALL BE USED.



ELEVATION



END ELEVATION



DOWEL BAR

FOOTING
 (IF CONST. JNT. USED)

QUANTITIES BASED ON 2'-0"

DIMENSIONS AND CONCRETE QUANTITIES							TOTAL CONC. CU. YD.
COMMON DIMENSIONS USING C.M. ARCH PIPE							
SPAN	RISE	THICK	H	B	G	M	
18"	11"	.064	2'-7"	1'-4"	2'-5"	1'-0"	0.604
22"	13"	.064	2'-9"	1'-5"	2'-9"	1'-2"	0.712
25"	16"	.064	3'-0"	1'-6"	3'-3"	1'-4"	0.877
29"	18"	.079	3'-2"	1'-7"	3'-7"	1'-6"	1.015
36"	22"	.079	3'-6"	1'-9"	4'-3"	1'-9"	1.306
43"	27"	.079	3'-11"	2'-0"	5'-1"	2'-1"	1.796
50"	31"	.109	4'-3"	2'-2"	5'-9"	2'-4"	2.206
58"	36"	.109	4'-8"	2'-4"	6'-7"	2'-8"	2.794
65"	40"	.138	5'-0"	2'-6"	7'-4"	3'-0"	3.387
72"	44"	.138	5'-4"	2'-8"	8'-0"	3'-3"	3.995

REINFORCING QUANTITIES									
SPAN	18"	22"	25"	29"	36"	43"	50"	65"	72"
BARS X									
QTY.	5	5	5	6	6	7	7	8	8
LBS.	12	12	12	14	14	16	16	19	19

REVISIONS		
NO.	DATE	DESCRIPTION

APPROVED: DATE May 6, 1930

STANDARD CONCRETE "L" ENDWALL FOR SINGLE PIPE CULVERTS
 18" THRU 72" ARCH PIPE
 CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

STD. NO.	REV.
30 01	

Item # 13

GENERAL NOTES:

ALL CORNERS TO BE CHAMFERED 1".

THE CONTRACTOR WILL BE REQUIRED TO PLACE 2-#6 BARS "Y" IN TOP OF ALL ENDWALLS FOR PIPE CULVERTS 42" AND OVER WITH A MIN. OF 3" COVER AND A LENGTH OF 6" LESS THAN ENDWALL.

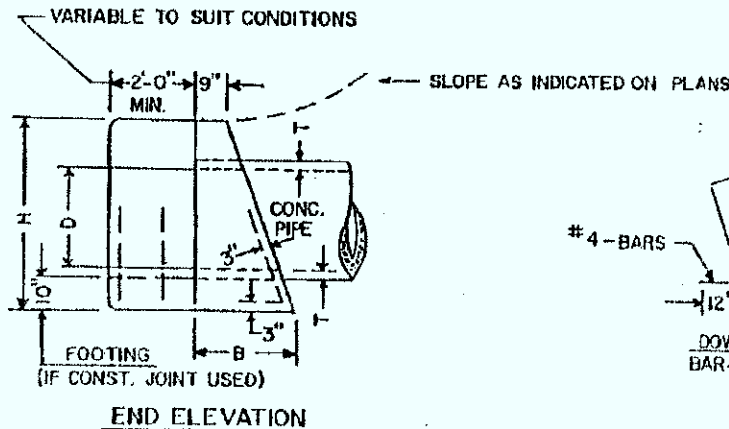
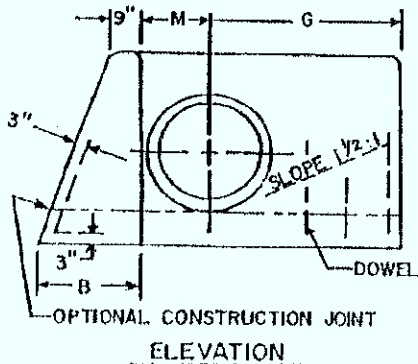
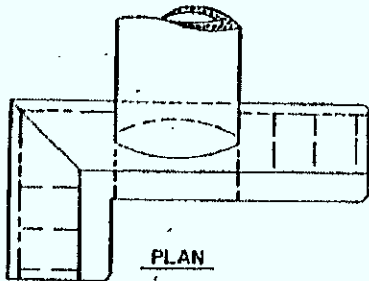
IF CONTRACTOR ELECTS TO USE CONSTRUCTION JOINT AT BOTTOM OF PIPE, BAR "X" (DOWELS) SHALL BE PLACED IN THE BASE AS SHOWN ON PLANS. SPACING OF BARS TO BE ON APPROXIMATELY 12" CENTERS UNLESS ENGINEER DIRECTS OTHERWISE.

IF THE CONTRACTOR ELECTS TO USE CONSTRUCTION JOINT AT BOTTOM OF PIPE AND POUR SLAB SEPARATELY, THE TOP OF BASE SHALL BE LEFT ROUGH.

FORMS ARE TO BE USED FOR THE CONSTRUCTION OF BASE SLAB.

WALL THICKNESS (T) SHOWN IS NOT TO BE INTERPRETED TO MEAN THE THICKNESS ACCEPTABLE, BUT ARE USED ONLY IN COMPUTATIONS OF ENDWALL QUANTITIES.

CLASS "AA" CONCRETE SHALL BE USED.



		REINFORCING QUANTITIES									
DIA.	15"	18"	24"	30"	36"	42" CM	42" RC	48" CM	48" RC		
BARS	X	X	X	X	X	X	Y	X	Y	X	Y
QTY.	5	5	6	6	7	7	2	7	2	8	2
LBS.	12	12	14	14	16	47	49	52	55		

COMMON DIMENSIONS							COMMON DIMENSIONS					COMMON DIMENSIONS	
D	H	B	G	M	T	CU. YD.	H	B	G	M	CU. YD.		
15"	3'-4"	1'-8"	2'-9"	1'-0"	1 7/8"	0.960	3'-0"	1'-6"	2'-6"	0'-11"	0.770		
18"	3'-7"	1'-10"	3'-2"	1'-2"	2"	1.193	3'-3"	1'-8"	2'-11"	1'-0"	0.964		
24"	4'-2"	2'-1"	4'-0"	1'-5"	2 1/2"	1.711	3'-9"	1'-11"	3'-8"	1'-3"	1.385		
30"	4'-9"	2'-5"	4'-7"	1'-9"	2 3/4"	2.394	4'-3"	2'-2"	4'-5"	1'-6"	1.908		
36"	5'-3"	2'-8"	5'-6"	2'-0"	3"	3.169	4'-9"	2'-5"	5'-2"	1'-9"	2.544		
42"	5'-10"	2'-11"	6'-4"	2'-4"	3 1/2"	4.139	5'-3"	3'-3"	5'-11"	2'-0"	3.301		
48"	6'-5"	3'-3"	7'-2"	2'-8"	4"	5.422	5'-9"	2'-11"	6'-0"	2'-3"	4.193		

REVISIONS		
NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 1980

STANDARD CONCRETE "L" ENDWALL FOR SINGLE PIPE CULVERTS

15" THRU 48" PIPE

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

Item # 13

STD. NO.	REV
30.02	

GENERAL NOTES:

All corners are to be chamfered 1".

The Contractor will be required to place 2-6 bars "Y" in the top of all endwalls for pipe culverts 42" and over with a minimum of 3" cover and a length of 6" less than endwall.

Forms are to be used for construction of bottom slab.

Wall thickness (T) shown is not to be interpreted to mean the thickness acceptable, but is used only in computing endwall quantities.

If contractor elects to use construction joint at bottom of pipe and pours base separately, the top of the base shall be left rough.

When contractor elects to use construction joint at bottom of pipe, bar "X" (dowels) shall be placed in the base as shown on plans, spacing of bars to be approximately 12" centers unless engineers direct otherwise.

When skew angle of pipe is over 45°, use G-1 dimension for 45° plus 6" for each 5° over 45°, G2 dimension will be the new dimension divided by the cosine of the angle of pipe skew.

Class "AA" concrete shall be used.

All pipes will meet NCDOT-Division of Highways specifications for load bearing capacities.

REVISIONS

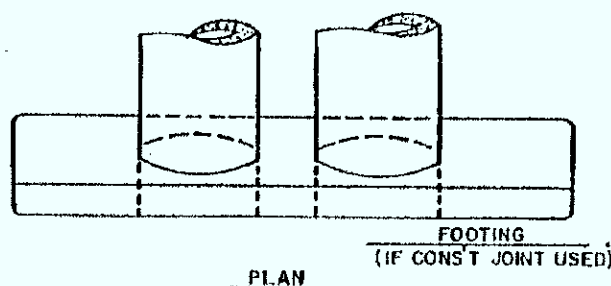
NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 1980

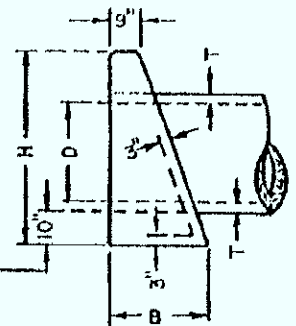
CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

Item # 13

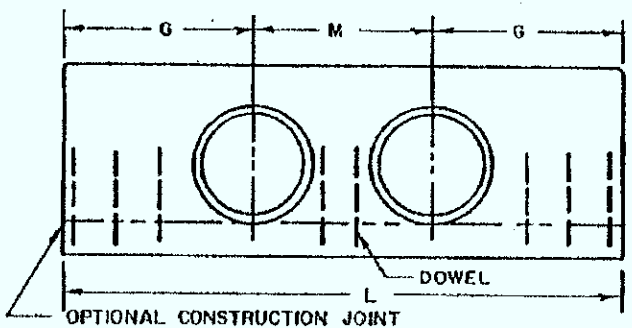
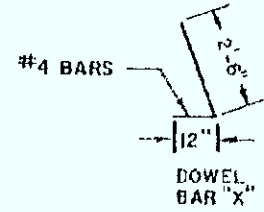
STD. NO.	REV.
30.03	



PLAN



END ELEVATION



ELEVATION

L	PIPE DIA.	SINGLE PIPE						DOUBLE PIPE											
		15"	18"	24"	30"	36"	42"	48"	15"	18"	24"	30"	36"	42"	48"				
C.	BARS	x	x	x	x	x	x	y	x	y	x	x	x	x	x	y	x	y	
G	QTY.	2	2	3	3	4	4	5			2	2	3	3	4	4	5		
M	QTY.	-	-	-	-	-	2	-	2	1	1	2	2	2	2	2	3	2	
G	QTY.	2	2	3	3	4	4	5		2	2	3	3	4	4	5			
TOT.	LBS.	9	9	14	14	19	19	23	23	23	23	23	23	23	23	23	23	23	

SEE NOTE

L	PIPE DIA.	SINGLE PIPE						DOUBLE PIPE											
		15"	18"	24"	30"	36"	42"	48"	15"	18"	24"	30"	36"	42"	48"				
C.	BARS	x	x	x	x	x	x	y	x	y	x	x	x	x	x	y	x	y	
G	QTY.	2	2	3	3	4	4	5			2	2	3	3	4	4	5		
M	QTY.	-	-	-	-	-	2	-	2	1	1	1	2	2	2	2	2	2	
G	QTY.	2	2	3	3	4	4	5		2	2	3	3	4	4	5			
TOT.	LBS.	9	9	14	14	19	19	23	23	23	23	23	23	23	23	23	23	23	

SEE NOTES

DIMENSIONS AND CONCRETE QUANTITIES																	
D	COMMON DIMS.					CONCRETE PIPE				CORRUGATED METAL PIPE							
	H	B	G	T	L	CU.YD.	M	L	CU.YD.	H	B	G	L	CU.YD.	M	L	CU.YD.
15"	3'-4"	1'-8"	2'-9"	1 7/8"	5'-6"	0.734	2'-2"	7'-8"	0.970	3'-0"	1'-6"	2'-6"	5'-0"	0.573	1'-11"	6'-11"	0.780
18"	3'-7"	1'-10"	3'-2"	2"	6'-4"	0.958	2'-7"	8'-11"	1.274	3'-3"	1'-8"	2'-11"	5'-10"	0.767	2'-3"	8'-1"	1.014
24"	4'-2"	2'-1"	4'-0"	2 1/2"	8'-0"	1.506	3'-5"	11'-5"	2.010	3'-9"	1'-11"	3'-8"	7'-4"	1.200	3'-0"	10'-4"	1.597
30"	4'-9"	2'-5"	4'-7"	2 3/4"	9'-2"	2.145	4'-3"	13'-5"	2.920	4'-3"	2'-2"	4'-5"	8'-10"	1.757	3'-9"	12'-7"	2.340
36"	5'-3"	2'-8"	5'-6"	3"	11'-0"	3.040	5'-0"	16'-0"	4.086	4'-9"	2'-5"	5'-2"	10'-4"	2.456	4'-6"	14'-10"	3.288
42"	5'-10"	2'-11"	6'-4"	3 1/2"	12'-8"	4.120	5'-10"	18'-6"	5.534	5'-3"	2'-8"	5'-11"	11'-10"	3.310	5'-3"	17'-1"	4.434
48"	6'-5"	3'-3"	7'-2"	4"	14'-4"	5.535	6'-6"	21'-0"	7.427	5'-9"	2'-11"	6'-8"	13'-4"	4.337	6'-0"	19'-4"	5.812

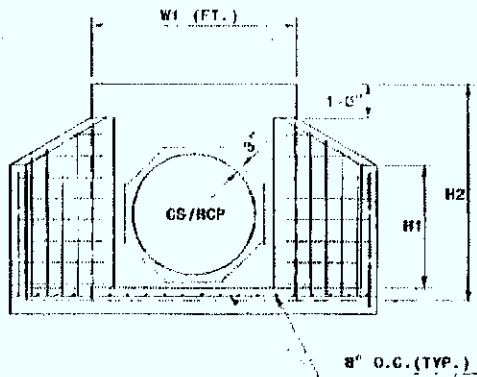
REVISIONS		
NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 1980

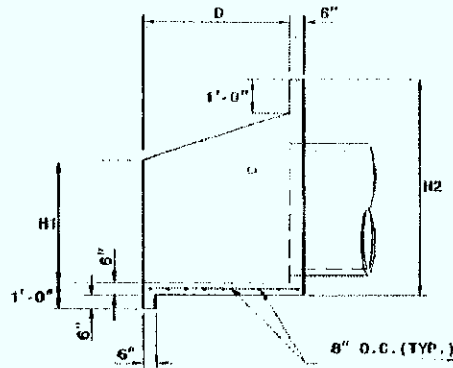
STANDARD CONCRETE ENDWALL FOR SINGLE AND DOUBLE PIPE CULVERTS
 15" THRU 48" PIPE - 90° SKEW
 CITY OF GREENVILLE, N.C. - ENGINEERING DEPT.

STD. NO.	REV.
30.04	

Item # 13



ELEVATION

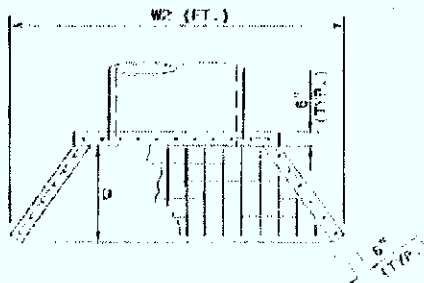


SIDE

NOTES:

- * USE 4000 PSI CONCRETE.
- * PROVIDE ALL REINFORCING STEEL WHICH MEETS ASTM A615 FOR GRADE 60 AND WELDED WIRE FABRIC CONFORMING TO ASTM A105 WITH 2" MIN. CLEARANCE.
- * PLACE LIFT HOLES OR PINS IN ACCORDANCE WITH OSHA STANDARD 1926.704.
- * PIPE TO BE GROUTED INTO HEADWALL AT JOB SITE BY CONTRACTOR
- * ALL ELEMENTS PRECAST TO MEET ASTM C913.
- * WELDED WIRE FABRIC MAY BE SUBSTITUTED FOR REBAR AS LONG AS THE SAME AREA OF STEEL IS PROVIDED.
- * CHAMFER ALL CORNERS 1" OR HAVE A RADIUS OF 1".

NOTE: THE MINIMUM BAR SIZE SHALL BE #5 BARS AT 8" CTS. THE CONTRACTOR WILL HAVE THE OPTION TO INCREASE THIS BAR SIZE AS NEEDED.



PLAN

ENDWALL DIMENSIONS

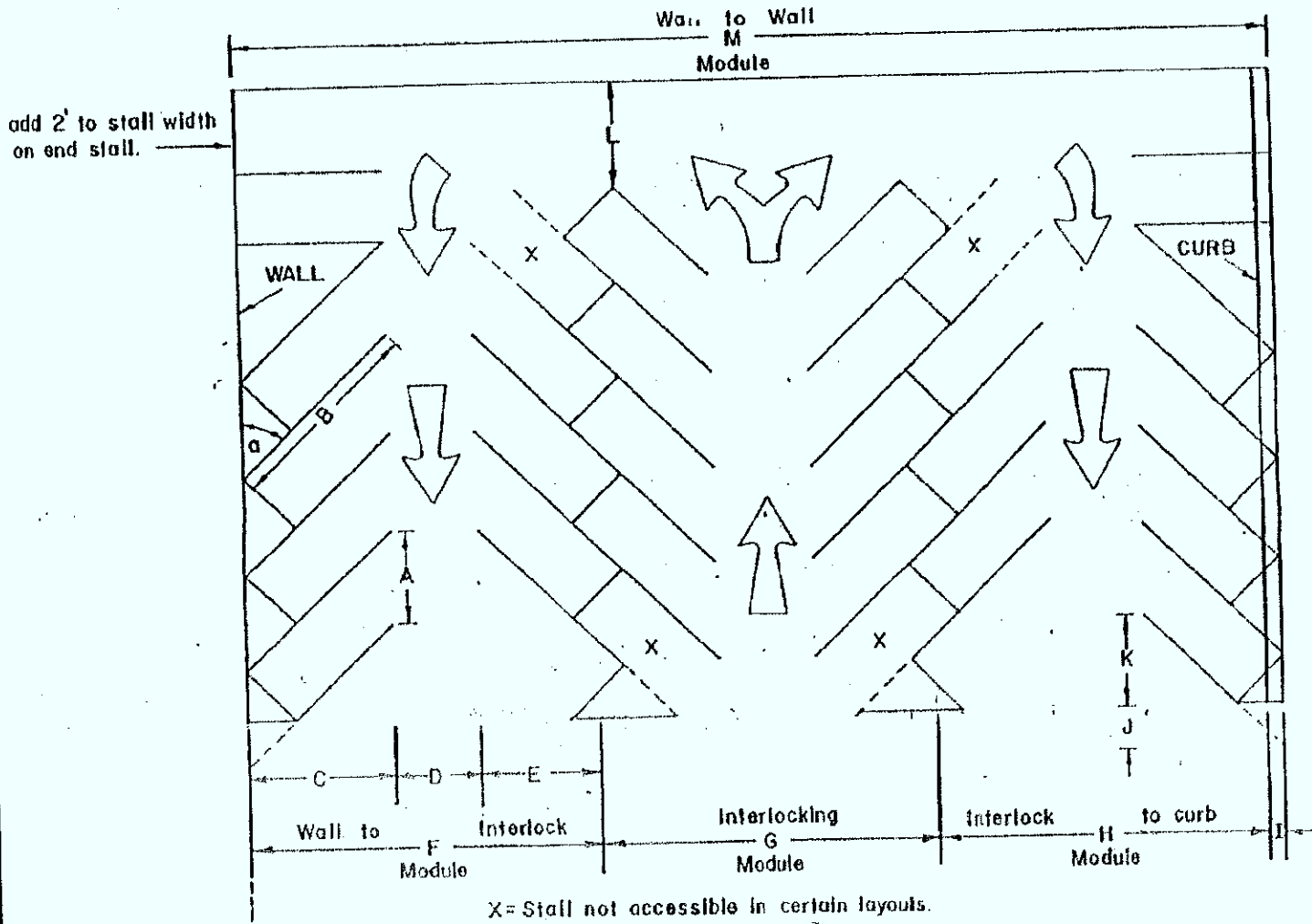
FT.	MINIMUM	NIN. /MAX.	MIN. /MAX.	NIN. /MAX.	MIN. /MAX.	NIN. /MAX.
PIPE DIA.	BAR SIZE	H1 (FT.)	H2 (FT.)	D (FT.)	W1	W2
1.0	#5 @ 8"	1.25/2.00	2.00/3.75	1.25/1.75	3.00/3.75	5.50/6.00
1.25	#5 @ 8"	1.25/2.00	3.00/3.75	1.25/2.00	3.50/3.75	6.50/6.75
1.50	#5 @ 8"	1.25/2.00	3.00/4.25	1.50/2.50	3.50/3.75	6.50/6.75
2.0	#5 @ 8"	1.50/2.50	4.00/4.75	1.75/2.50	4.00/4.25	7.50/8.25
2.5	#5 @ 8"	2.50/3.50	4.00/6.00	2.00/3.00	4.50/5.50	10.00/11.50
3.0	#5 @ 8"	3.00/3.50	5.00/6.00	2.75/3.50	5.25/5.75	11.50/11.75
3.5	#5 @ 8"	3.25/4.50	6.00/6.75	3.25/3.50	6.00/6.75	12.00/13.25
4.0	#5 @ 8"	3.50/4.50	6.50/7.00	3.25/3.50	6.50/6.75	13.00/13.25
4.5	#5 @ 8"	4.00/5.00	6.50/8.50	3.25/4.00	7.00/9.25	13.50/15.75
5.0	#5 @ 8"	4.50/5.00	7.00/8.50	3.25/4.00	7.25/9.25	13.75/15.75
5.5	#5 @ 8"	4.50/5.00	7.50/8.50	3.25/4.00	7.25/9.25	14.00/15.75
6.0	#5 @ 8"	4.50/5.00	7.50/8.50	3.25/4.00	7.75/9.25	14.75/16.75

PRECAST CONCRETE ENDWALL
 FOR SINGLE 12" THRU 72" PIPE - 90° SKEW

PRECAST CONCRETE ENDWALL
 FOR SINGLE 12" THRU 72" PIPE - 90° SKEW

PARKING

Item # 13



add 2' to stall width on end stall.

REVISIONS

NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 19

PARKING STANDARDS

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
55 01	

ANGLE

45°

60°

75°

90°

Stall width, parallel to aisle	A	10.6	12.0	12.7	13.4	8.7	9.8	10.4	10.9	7.8	8.8	9.3	9.8	7.5	8.5	9.0	9.5
Stall length of line	B	24.0	25.0	25.0	25.0	20.4	22.0	22.0	22.0	17.9	20.0	20.0	20.0	16.0	18.5	18.5	18.5
Stall depth of line	C	17.0	17.7	17.7	17.7	17.7	19.0	19.0	19.0	17.2	19.3	19.3	19.3	16.0	18.5	18.5	18.5
Aisle width between stall lines	D	11.0	13.0	12.0	11.0	14.0	18.0	16.0	15.0	17.4	25.0	23.0	22.0	20.0	28.0	26.0	25.0
Stall depth, interlock	E	14.3	14.7	14.5	14.3	15.8	16.9	16.8	16.6	16.2	18.2	18.1	18.1	16.0	18.5	18.5	18.5
Module, wall to interlock	F	42.3	45.4	44.2	43.0	47.5	53.9	51.8	50.6	50.8	60.9	60.4	59.4	52.0	65.0	63.0	62.0
Module, interlocking	G	39.6	42.4	41.0	39.6	45.6	51.8	49.6	48.2	49.2	61.4	59.2	58.2	52.0	65.0	63.0	62.0
Module, interlock to curb face	H	40.3	43.4	42.2	41.0	45.2	51.6	49.5	48.3	48.3	58.4	57.9	56.9	49.5	62.5	60.5	59.5
Bumper overhang (typical)	I	2.0	2.0	2.0	2.0	2.3	2.3	2.3	2.3	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Offset	J	5.3	6.0	6.4	6.7	1.9	2.1	2.3	2.4	0.5	0.6	0.6	0.6	0.0	0.0	0.0	0.0
Setback	K	11.7	11.7	11.3	11.0	8.2	9.0	8.8	8.7	4.5	4.6	4.6	4.6	0.0	0.0	0.0	0.0
Cross aisle, one way	L ₁	13	14	14	14	13	14	14	14	13	14	14	14	13	14	14	14
Cross aisle, two way	L ₂	22	24	24	24	22	24	24	24	22	24	24	24	22	24	24	24
Module, wall to wall	M	45.0	48.4	47.4	46.4	49.4	56.0	54.0	53.0	51.8	63.6	61.6	60.6	52.0	65.0	63.0	62.0

STALL WIDTH	7.5' Compacts Only	8.5'	9.0'	9.5'	7.5' Compacts Only	8.5'	9.0'	9.5'	7.5' Compacts Only	8.5'	9.0'	9.5'	7.5' Compacts Only	8.5'	9.0'	9.5'
-------------	--------------------	------	------	------	--------------------	------	------	------	--------------------	------	------	------	--------------------	------	------	------

REVISIONS

NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 1980

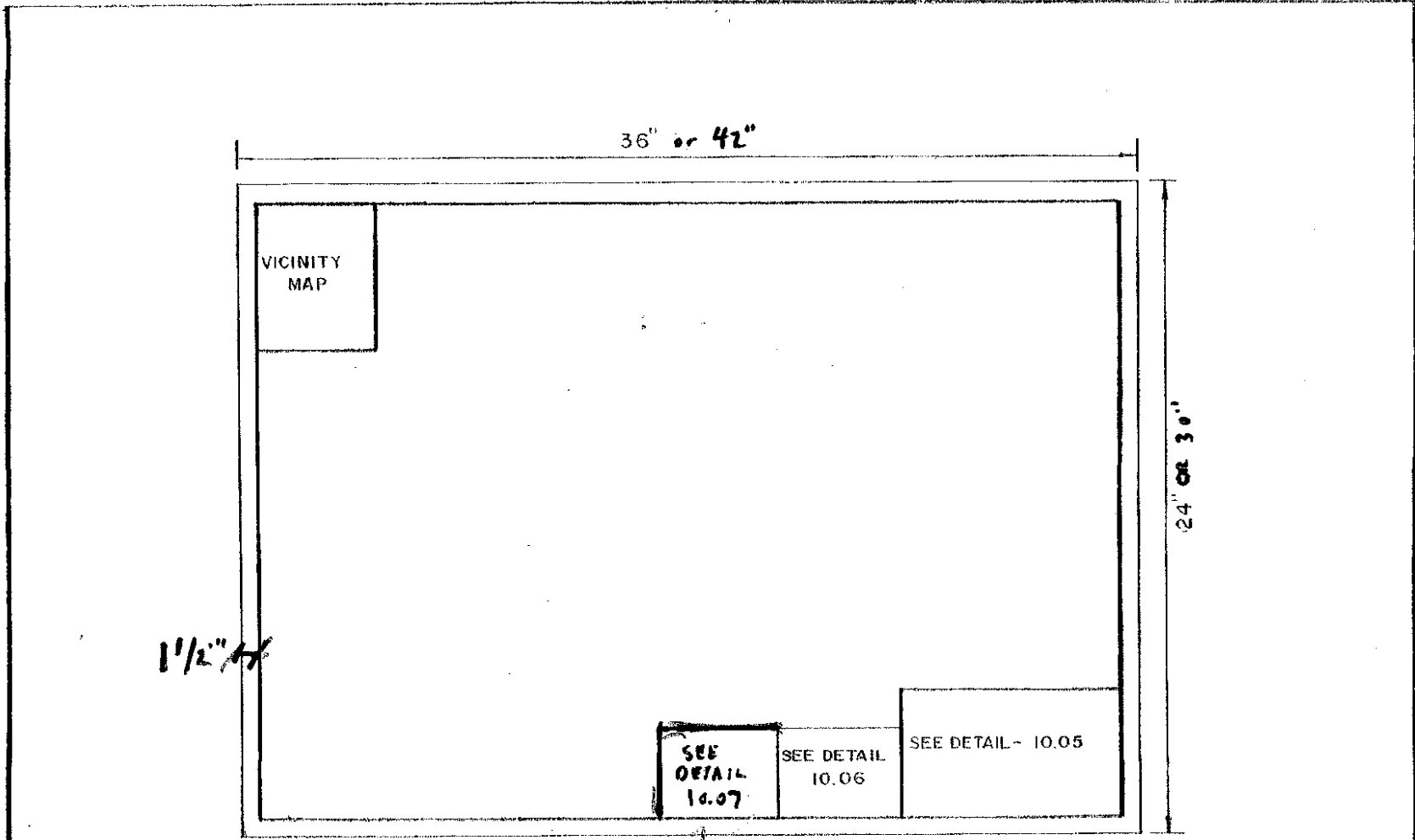
MINIMUM PARKING STANDARDS

CITY OF GREENVILLE, N.C.—ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
5502	

**PLAT PREPARATION
STANDARD SIZES
AND CERTIFICATIONS**



1 1/2" ~~1/2"~~

SEE
DETAIL
10.07

SEE DETAIL
10.06

SEE DETAIL - 10.05

24" or 30"

1/2"

REVISIONS

NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 1980

STANDARD PRELIMINARY PLAT LAYOUT
CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

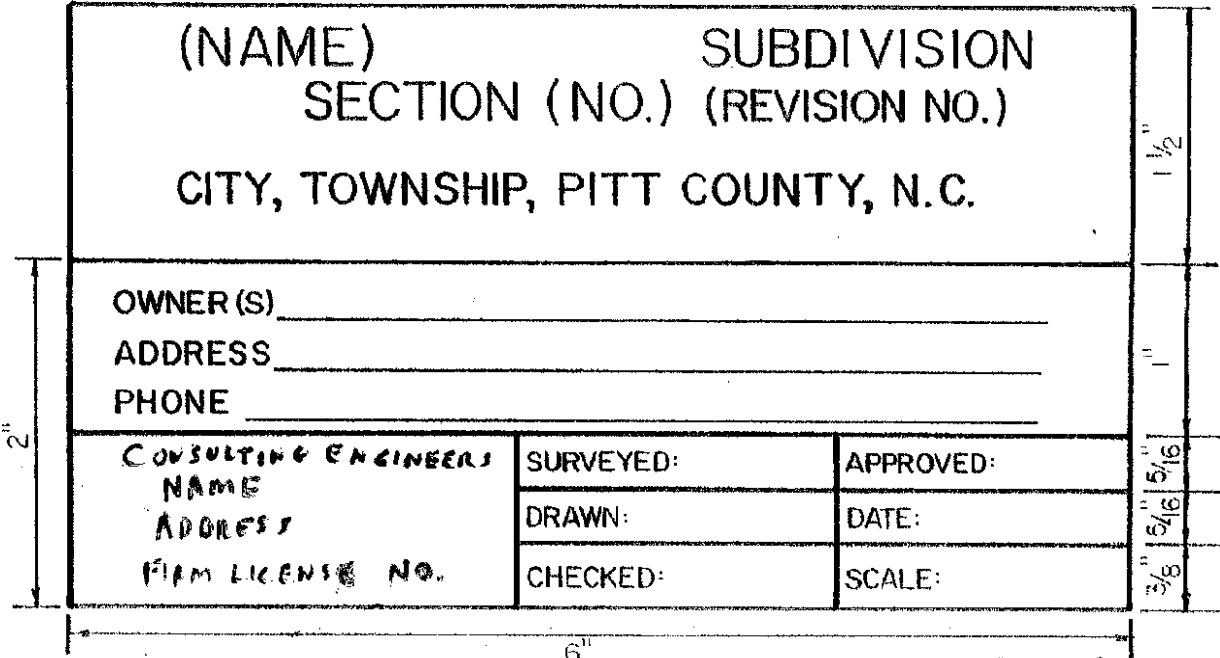
STD. NO.	REV.
10.04	

Item # 13

(NAME) SUBDIVISION
 SECTION (NO.) (REVISION NO.)
 CITY, TOWNSHIP, PITT COUNTY, N.C.

OWNER(S) _____
 ADDRESS _____
 PHONE _____

CONSULTING ENGINEERS NAME ADDRESS FIRM LICENSE NO.	SURVEYED:	APPROVED:
	DRAWN:	DATE:
	CHECKED:	SCALE:



REVISIONS

NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 1980

STANDARD TITLE BLOCK FOR PRELIMINARY
 CITY OF GREENVILLE, N.C.—ENGINEERING DEPT.
 Item # 13

STD. NO.	REV.
10.05	

3/4"

APPROVAL

THIS PRELIMINARY PLAT # _____, AND THE
STREET NAME(S) HEREON WERE
APPROVED BY THE GREENVILLE PLANNING
AND ZONING COMMISSION AT A MEETING
HELD THE _____ DAY OF _____
19____.

SIGNED _____ CHAIRMAN

SIGNED _____ CITY PLANNER

2 1/2"

REVISIONS

NO.	DATE	DESCRIPTION
A	11-16-83	ENGINEER TO PLANNER

APPROVED: DATE May 8, 1980

STANDARD "APPROVALS" INFORMATION BLOCK

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

Item # 13

STD. NO.	REV
10.06	A

COMMENTS:

THE SURVEYOR'S CERTIFICATION SHALL BE SUBSTANTIALLY IN THE FORM SHOWN FOR SURVEYS MADE BY TRADITIONAL SURVEY METHODS. FOR SURVEYS PERFORMED USING BOTH TRADITIONAL AND GPS SURVEYING METHODS USE MSDD STANDARD 10.21.2 THE SURVEYOR SHOULD REFER TO AND COMPLY WITH THE CURRENT NCBELS RULES 21 NCAC 56 .1600, "STANDARDS OF PRACTICE OF LAND SURVEYING IN NORTH CAROLINA", AND G.S. 47-30 FOR ANY RULE AMENDMENTS. www.ncbels.org

REQUIRED MINIMUM ACCURACY STANDARDS: (21 NCAC 56 .1603 & .1605)

HORIZONTAL: "URBAN LAND SURVEYS", CLASS "A" (1:10,000+)

VERTICAL: "URBAN AND SUBURBAN VERTICAL CONTROL SURVEYS", CLASS "A"

(Error not to exceed 0.10 times the square root of the numbers of miles run from reference station)

SURVEYOR'S CERTIFICATION

I, _____, CERTIFY THAT THIS PROJECT WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AND ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK _____, PAGE _____, OR FROM BOOKS REFERENCED HEREON); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN BOOK _____, PAGE _____, OR AS REFERENCED HEREON; THAT THE RATIO OF PRECISION AS CALCULATED IS 1: _____; THAT THIS TOPOGRAPHIC SURVEY WAS PERFORMED TO MEET FEDERAL GEOGRAPHIC DATA COMMITTED STANDARDS AS APPLICABLE; THAT THE TOPOGRAPHIC DATA WAS OBTAINED ON _____ (insert dates); THAT THE SURVEY WAS COMPLETED ON _____ (insert date); THAT THE CONTOURS SHOWN AS BROKEN LINES MAY NOT MEET THE STATED STANDARD; THAT VERTICAL CONTROL WAS ESTABLISHED AT THE SITE TO THE CLASS "A" STANDARD; AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE "STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA" (21 NCAC 56.1600).

WITNESS MY ORIGINAL SIGNATURE AND SEAL THIS THE _____ DAY OF _____, 20 ____.

SIGNED _____
PROFESSIONAL LAND SURVEYOR No. 1. #####

2 1/2"

5 1/2"

NO.	DATE	DESCRIPTION
A	05/06/09	NEW CERTIFICATION REQUIRED PER NCBELS RULES

APPROVED: PENDING

PRELIMINARY PLAT SURVEYOR'S CERTIFICATION USING TRADITIONAL ONLY SURVEY METHODS

CITY OF GREENVILLE, N.C.-ENGINEERING DEPT.

STD. NO.	REV.
10.07.1	A

COMMENTS:

THE SURVEYOR'S CERTIFICATION SHALL BE SUBSTANTIALLY IN THE FORM SHOWN FOR SURVEYS MADE BY BOTH TRADITIONAL AND GPS SURVEY METHODS. FOR TRADITIONAL ONLY SURVEYS USE MSDD STANDARD 10.16.1. THE SURVEYOR SHOULD REFER TO AND COMPLY WITH THE CURRENT NCBELS RULES 21 NCAC 56 .1600, "STANDARDS OF PRACTICE OF LAND SURVEYING IN NORTH CAROLINA", AND G.S. 47-30 FOR ANY RULE AMENDMENTS. www.ncbels.org

REQUIRED MINIMUM ACCURACY STANDARDS: (21 NCAC 56 .1603 & .1605)

HORIZONTAL: "URBAN LAND SURVEYS", CLASS "A" (1:10,000+), GPS (0.07 feet +/- 50PPM or less)

VERTICAL: "URBAN AND SUBURBAN VERTICAL CONTROL SURVEYS", CLASS "A" (Error not to exceed 0.10 times the square root of the numbers of miles run from reference station)

REFERENCE INFORMATION REQUIRED FOR GPS SURVEYS IN THE CERTIFICATION. (REF. NCBELS BOARD RULE 21 NCAC 56 .1607)

- (1) POSITIONAL ACCURACY: _____ (0.07 feet +/- 50PPM or less)
- (2) TYPE OF GPS FIELD PROCEDURE: _____ (STATIC, REAL-TIME KINEMATIC, REAL-TIME KINEMATIC NETWORK, ONLINE POSITION USER SERVICE)
- (3) DATE (S) OF SURVEY: _____
- (4) DATUM / EPOCH: _____ (HORIZONTAL (NAD83/86, NAD83(NSRS2007), etc., VERTICAL (NAVD88))
- (5) PUBLISHED/FIXED-CONTROL STATIONS USED: _____ INCLUDE: STATION NAMES, HORIZONTAL POSITION (NORTHING AND EASTING), ELEVATION, DATUM AND EPOCH)
- (6) GEOID MODEL USED: _____ (GEOID03, GEOID06, GEOID09, etc.)
- (7) COMBINED GRID FACTOR(S): _____
- (8) UNITS: US SURVEY FOOT

SURVEYOR'S CERTIFICATION

I, _____, CERTIFY THAT THIS PROJECT WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK _____, PAGE _____, OR FROM BOOKS REFERENCED HEREON); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN BOOK _____, PAGE _____, OR AS REFERENCED HEREON; THAT THE RATIO OF PRECISION AS CALCULATED IS 1: _____ THAT THIS TOPOGRAPHIC SURVEY WAS PERFORMED TO MEET FEDERAL GEOGRAPHIC DATA COMMITTED STANDARDS AS APPLICABLE; THAT THE TOPOGRAPHIC DATA WAS OBTAINED ON _____ (insert dates); THAT THE SURVEY WAS COMPLETED ON _____ (insert date); THAT THE CONTOURS SHOWN AS BROKEN LINES MAY NOT MEET THE STATED STANDARD; THAT VERTICAL CONTROL WAS ESTABLISHED AT THE SITE TO THE CLASS "A" STANDARD THAT A GLOBAL POSITIONING SYSTEM (GPS) SURVEY WAS PERFORMED TO ESTABLISH THE HORIZONTAL AND VERTICAL CONTROL FOR THE PROJECT; THAT THE (GPS) OBSERVATIONS WERE PERFORMED TO THE GEOSPATIAL POSITIONING ACCURACY STANDARDS, PART 2: STANDARDS FOR GEODETIC NETWORKS AT THE CLASS "A" ACCURACY CLASSIFICATION (95% CONFIDENCE) AND THE FOLLOWING INFORMATION WAS USING TO PERFORM THE GPS SURVEY:

POSITIONAL ACCURACY: _____ TYPE OF GPS FIELD PROCEDURE: _____ DATE(S) OF SURVEY: _____
 DATUM / EPOCH: _____ GEOID MODEL: _____ UNITS: _____
 PUBLISHED/FIXED-CONTROL MONUMENTS USED: _____

AND THAT THIS MAP MEETS THE REQUIREMENTS OF "THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA" (21 NCAC 56 .1600).

WITNESS MY ORIGINAL SIGNATURE AND SEAL THIS THE _____ DAY OF _____, 20 _____

SIGNED _____
 PROFESSIONAL LAND SURVEYOR No. L-0000

2 1/2"

9 1/4"

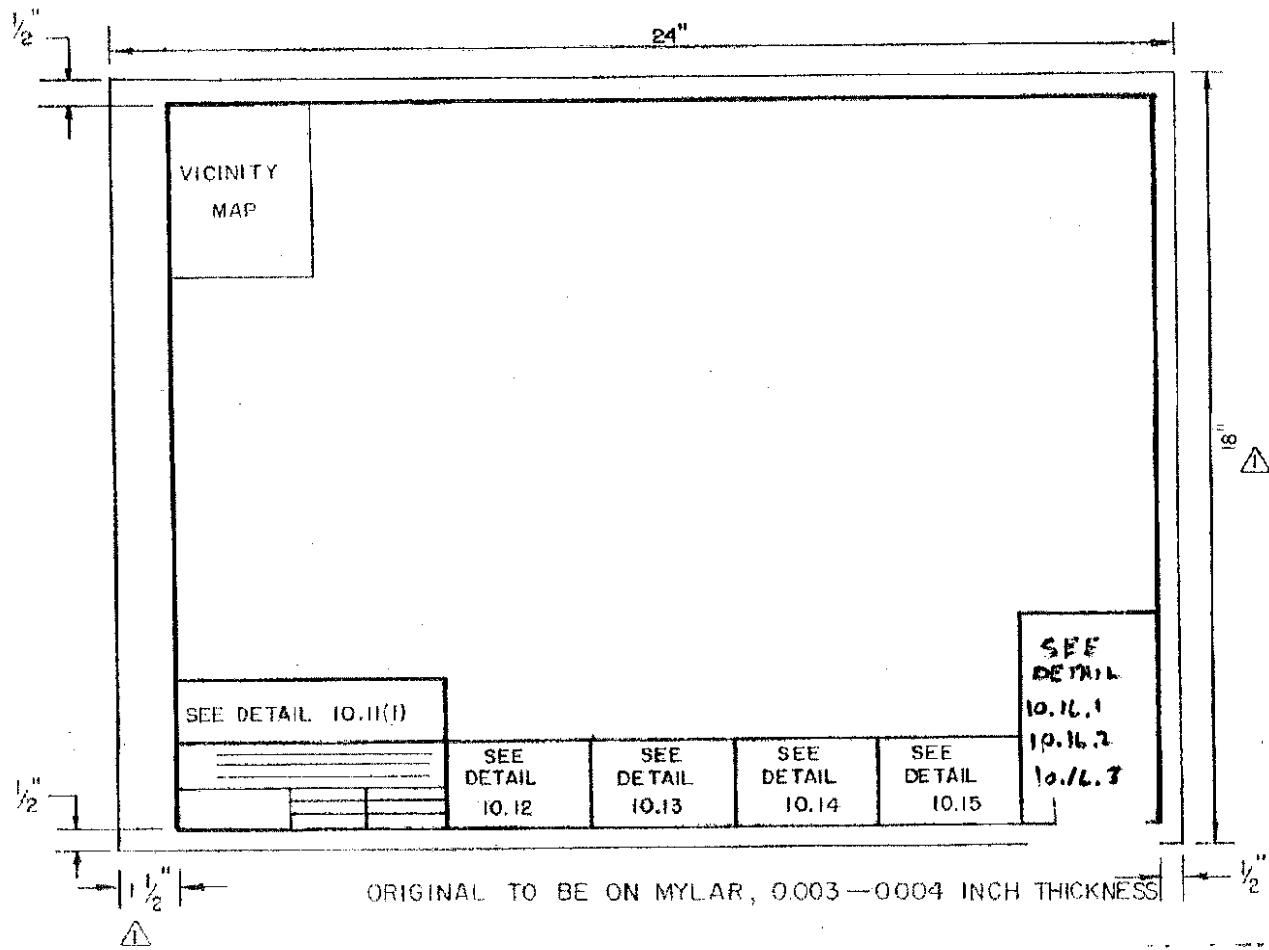
NO.	DATE	DESCRIPTION
A	05/05/08	NEW CERTIFICATION REQUIRED PER NCBELS RULES

APPROVED: PENDING

PRELIMINARY PLAT SURVEYOR'S CERTIFICATION USING TRADITIONAL AND GPS SURVEY METHODS

CITY OF GREENVILLE, N.C.-ENGINEERING DEPT.

STD. NO.	REV.
10.07.2	A



ORIGINAL TO BE ON MYLAR, 0.003—0.004 INCH THICKNESS

RESERVE AREA FOR REGISTER OF NEEDS STICKER

REVISIONS

NO.	DATE	DESCRIPTION
△	9/91	DIM. CHANGE

APPROVED: DATE MAY 8, 1980

STANDARD FINAL PLAT LAYOUT

CITY OF GREENVILLE, N.C.—ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
10.10	1

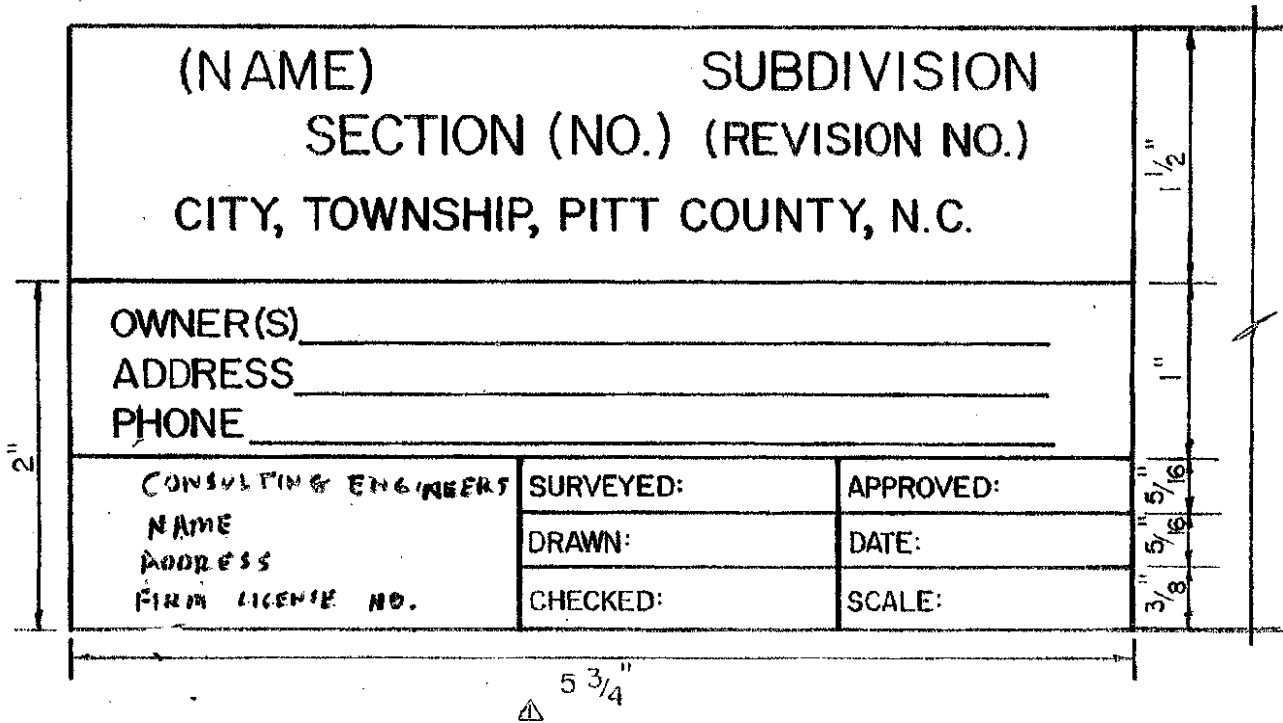
(NAME) SUBDIVISION
 SECTION (NO.) (REVISION NO.)
 CITY, TOWNSHIP, PITT COUNTY, N.C.

OWNER(S) _____
 ADDRESS _____
 PHONE _____

CONSULTING ENGINEERS
 NAME
 ADDRESS
 FIRM LICENSE NO.

SURVEYED:
 DRAWN:
 CHECKED:

APPROVED:
 DATE:
 SCALE:



REVISIONS

NO.	DATE	DESCRIPTION
△	9/91	DIM. CHANGE

APPROVED: DATE May 8, 1980

STANDARD TITLE BLOCK FOR FINAL PLATS
 CITY OF GREENVILLE, N.C.—ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
1011	1

3 1/4"

SOURCE OF TITLE

THIS IS TO CERTIFY THAT THE LAST INSTRUMENT(S) IN THE CHAIN OF TITLE(S) OF THIS PROPERTY AS RECORDED IN THE PITT COUNTY REGISTRY AT GREENVILLE, NORTH CAROLINA IS:

DEED BOOK _____ PAGE _____

DEED BOOK _____ PAGE _____

DEED BOOK _____ PAGE _____

N.C. Lit. NO. _____

2"

REVISIONS

NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 1980

STANDARD "SOURCE OF TITLE" INFORMATION BLOCK
CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.
 Item # 13

STD. NO.	REV.
10.12	1

3 1/4"

OWNERS STATEMENT

THIS IS EVIDENCE THAT THIS SUB-DIVISION IS MADE AT THE REQUEST OF

SWORN AND SUBSCRIBED TO BEFORE
ME THIS _____ DAY OF _____ 20__

NOTARY PUBLIC
MY COMMISSION EXPIRES _____

2"

REVISIONS		
NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 1990

STANDARD OWNERS STATEMENT BLOCK
CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.
Item # 13

STD. NO.	REV.
10.13	

3 1/4"

APPROVAL

THIS FINAL PLAT, # _____, AND THE
 STREET NAME(S) HEREON WERE
 APPROVED BY THE GREENVILLE PLANNING
 AND ZONING COMMISSION AT A MEETING
 HELD THE _____ DAY OF _____
 20 _____.

SIGNED _____
 CHAIRMAN

SIGNED _____
 CITY PLANNER

2"

REVISIONS

NO.	DATE	DESCRIPTION
A	11-16-83	ENGINEER TO PLANNER

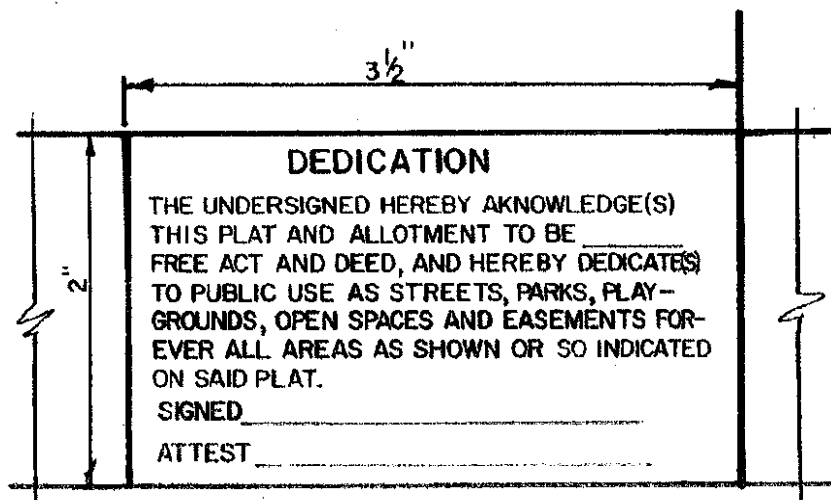
APPROVED: DATE May 8, 1980

STANDARD "APPROVALS" INFORMATION BLOCK

CITY OF GREENVILLE, N.C.—ENGINEERING DEPT.

STD. NO.	REV.
10.14	A

Item # 13



REVISIONS

NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 1980

STANDARD DEDICATION INFORMATION BLOCK
CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.
Item # 13

STD. NO.	REV.
10.15	

COMMENTS:

THE SURVEYOR'S CERTIFICATION SHALL BE SUBSTANTIALLY IN THE FORM SHOWN FOR SURVEYS MADE BY TRADITIONAL SURVEY METHODS. FOR SURVEYS PERFORMED USING BOTH TRADITIONAL AND GPS SURVEYING METHODS USE MSDD STANDARD 10.16.2. THE SURVEYOR SHOULD REFER TO AND COMPLY WITH THE CURRENT NCBELS RULES 21 NCAC 56 .1600, "STANDARDS OF PRACTICE OF LAND SURVEYING IN NORTH CAROLINA", AND G.S. 47-30 FOR ANY RULE AMENDMENTS.
www.ncbels.org

REQUIRED MINIMUM ACCURACY STANDARDS: (21 NCAC 56 .1603 & .1605)

HORIZONTAL: "URBAN LAND SURVEYS", CLASS "A" (1:10,000+)

VERTICAL: "URBAN AND SUBURBAN VERTICAL CONTROL SURVEYS", CLASS "A" (Error not to exceed 0.10 times the square root of the numbers of miles run from reference station)

SURVEYOR'S CERTIFICATION

I, _____, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL FIELD SURVEY PERFORMED UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK _____, PAGE _____, OR FROM BOOKS REFERENCED HEREON); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN BOOK _____, PAGE _____, OR AS REFERENCED HEREON; THAT THE RATIO OF PRECISION AS CALCULATED IS 1: _____; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED.

I, FURTHER CERTIFY PURSUANT TO G.S. 47-30 (f)(11)(a), THIS SURVEY CREATES A SUBDIVISION OF LAND WITHIN A COUNTY OR MUNICIPALITY THAT HAS AN ORDINANCE THAT REGULATES PARCELS OF LAND.

WITNESS MY ORIGINAL SIGNATURE AND SEAL. THIS THE _____ DAY OF _____, 20____.

SIGNED _____
 PROFESSIONAL LAND SURVEYOR No. L-####

NO.	DATE	DESCRIPTION
A	11/16/83	GS 47-30 AMENDED
B	12/13/98	GS 47-30 AMENDED ADD REVIEW OFFICER
C	05/06/09	GS 47-30 & NCBELS RULES AMENDED

APPROVED: PENDING

FINAL PLAT SURVEYOR'S CERTIFICATION USING TRADITIONAL ONLY SURVEY METHODS
CITY OF GREENVILLE, N.C.-ENGINEERING DEPT.

STD. NO.	REV.
10.16.1	C

COMMENTS:

THE SURVEYOR'S CERTIFICATION SHALL BE SUBSTANTIALLY IN THE FORM SHOWN FOR SURVEYS MADE BY BOTH TRADITIONAL AND GPS SURVEY METHODS. FOR TRADITIONAL ONLY SURVEYS USE MSDD STANDARD 10.16.1. THE SURVEYOR SHOULD REFER TO AND COMPLY WITH THE CURRENT NCBELS RULES 21 NCAC 56 .1600, "STANDARDS OF PRACTICE OF LAND SURVEYING IN NORTH CAROLINA", AND G.S. 47-30 FOR ANY RULE AMENDMENTS. www.ncbels.org

REQUIRED MINIMUM ACCURACY STANDARDS: (21 NCAC 56 .1603 & .1605)

HORIZONTAL: "URBAN LAND SURVEYS", CLASS "A" (1:10,000+)
 VERTICAL: "URBAN AND SUBURBAN VERTICAL CONTROL SURVEYS", CLASS "A"
 (Error not to exceed 0.10 times the square root of the numbers of miles run from reference station)

REFERENCE INFORMATION REQUIRED FOR GPS SURVEYS IN THE CERTIFICATION. (REF. NCBELS BOARD RULE 21 NCAC 56 .1607)

- (1) POSITIONAL ACCURACY: _____ (0.07 feet +/- 50PPM or less)
- (2) TYPE OF GPS FIELD PROCEDURE : _____
 (STATIC, REAL-TIME KINEMATIC, REAL-TIME KINEMATIC NETWORK, ONLINE POSITION USER SERVICE)
- (3) DATE (S) OF SURVEY: _____
- (4) DATUM / EPOCH: _____
 (HORIZONTAL (NAD83/86, NAD83(NRSRS2007), etc.; VERTICAL (NAVD88))
- (5) PUBLISHED/FIXED-CONTROL STATIONS USED: _____
 (INCLUDE: STATION NAMES, HORIZONTAL POSITION (NORTHING AND EASTING), ELEVATION, DATUM AND EPOCH)
- (6) GEOID MODEL USED: _____
 (GEOID05, GEOID06, GEOID09, etc.)
- (7) COMBINED GRID FACTOR(S): _____
- (8) UNITS: US SURVEY FOOT

NO.	DATE	DESCRIPTION
A	11/16/03	GS 47-30 AMENDED
B	12/13/08	GS 47-30 AMENDED ADD REVIEW OFFICER
C	05/06/09	GS 47-30 & NCBELS RULES AMENDED

SURVEYOR'S CERTIFICATION

I, _____, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL FIELD SURVEY PERFORMED UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK _____, PAGE _____, OR FROM BOOKS REFERENCED HEREON); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN BOOK _____, PAGE _____, OR AS REFERENCED HEREON; THAT THE RATIO OF PRECISION FOR TRADITIONAL SURVEY METHODS IS 1: _____; THAT THE GLOBAL POSITIONING SYSTEM (GPS) OBSERVATIONS WERE PERFORMED TO THE GEOSPATIAL POSITIONING ACCURACY STANDARDS, PART 2: STANDARDS FOR GEODETIC NETWORKS AT THE CLASS "A" ACCURACY CLASSIFICATION (95% CONFIDENCE) AND THE FOLLOWING INFORMATION WAS USING TO PERFORM THE GPS SURVEY:

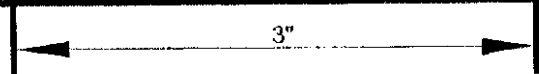
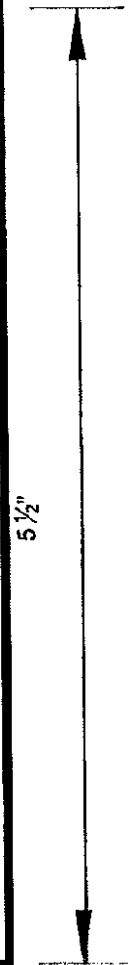
POSITIONAL ACCURACY: _____
 TYPE OF GPS FIELD PROCEDURE: _____
 DATE(S) OF SURVEY: _____
 DATUM / EPOCH: _____
 PUBLISHED/FIXED-CONTROL MONUMENTS USED: _____

 GEOID MODEL: _____
 COMBINED GRID FACTOR: _____
 UNITS: _____

THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED.
 I, FURTHER CERTIFY PURSUANT TO G.S.47-30 (f)(1)(a), THIS SURVEY CREATES A SUBDIVISION OF LAND WITHIN A COUNTY OR MUNICIPALITY THAT HAS AN ORDINANCE THAT REGULATES PARCELS OF LAND.

WITNESS MY ORIGINAL SIGNATURE AND SEAL THIS THE _____ DAY OF _____, 20 _____

SIGNED _____
 PROFESSIONAL LAND SURVEYOR No. L-###



APPROVED: PENDING

FINAL PLAT SURVEYOR'S CERTIFICATION USING TRADITIONAL AND GPS SURVEY METHODS
 CITY OF GREENVILLE, N.C.-ENGINEERING DEPT.

STD. NO.	REV.
10.16.2	C

REVIEW OFFICER'S CERTIFICATION

I, _____, A REVIEW OFFICER OF PITT COUNTY, N.C., CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING.

BY _____
REVIEW OFFICER

DATE: _____

2"

3"

NO.	DATE	DESCRIPTION
A	5/06/09	NEW AS A SEPARATE CERTIFICATION

APPROVED: PENDING

FINAL PLAT REVIEW OFFICER'S CERTIFICATION

CITY OF GREENVILLE, N.C.-ENGINEERING DEPT.

STD. NO.	REV.
10.16.3	A

1/2"

24"

VICINITY MAP

NOTE: NORTH ARROW TO BE IN UPPER 180° QUADRANTS



1" = 1000'

1/2"

1/2"

18"

LEGEND

NEW CITY LIMIT - - - - -
OLD CITY LIMIT - - - - -
CITY LIMIT - - - - -

SEE
DETAIL
10.17.1
10.17.2

(NAME)	SUBDIVISION	MAP NO.	PLATS RECORDED	BOOK	PAGE	MAP SHOWING AREA ANNEXED BY THE CITY OF GREENVILLE, N.C. (DATE) (ORDINANCE NO.) (AREA) TOWNSHIP, PITT COUNTY, N.C.
SECTION (NO)						
10.17.1						
10.17.2						

SURVEYED: _____
DRAWN: _____
CHECKED: _____
APPROVED: _____
DATE: _____
SCALE: _____

2 1/4" 1 3/4" 1 3/4" 1 1/4" 2 3/4" 1" 1" 7 1/4" 3"

NO.	DATE	DESCRIPTION
1	9/91	DIM. CHANGE

ORIGINAL TO BE ON DRAFTING FILM, 0.003--0.004 INCH THICKNESS
ONE FILM COPY FOR CITY FILES

RESERVE AREA FOR REGISTER OF DEEDS STICKER

APPROVED: DATE Dec 31, 1991

STANDARD FORMAT ANNEXATION MAP

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
10.17	1

COMMENTS:

THE SURVEYOR'S CERTIFICATION SHALL BE SUBSTANTIALLY IN THE FORM SHOWN FOR SURVEYS MADE BY TRADITIONAL SURVEY METHODS. FOR SURVEYS PERFORMED USING BOTH TRADITIONAL AND GPS SURVEYING METHODS USE MSDD STANDARD 10.16.2. THE SURVEYOR SHOULD REFER TO AND COMPLY WITH THE CURRENT NCBELS RULES 21 NCAC 56 .1600, "STANDARDS OF PRACTICE OF LAND SURVEYING IN NORTH CAROLINA", AND G.S. 47-30 FOR ANY RULE AMENDMENTS.
www.ncbels.org

REQUIRED MINIMUM ACCURACY STANDARDS: (21 NCAC 56 .1603 & .1605)

HORIZONTAL: "URBAN LAND SURVEYS", CLASS "A" (1:10,000+)
 VERTICAL: "URBAN AND SUBURBAN VERTICAL CONTROL SURVEYS", CLASS "A"
 (Error not to exceed 0.10 times the square root of the numbers of miles run from reference station)

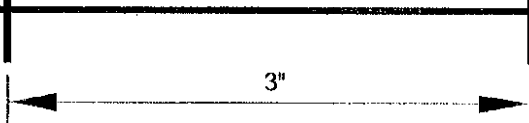
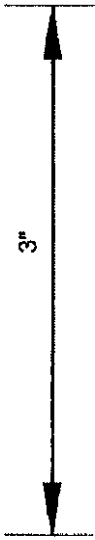
SURVEYOR'S CERTIFICATION

I, _____, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL FIELD SURVEY PERFORMED UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK _____, PAGE _____, OR FROM BOOKS REFERENCED HEREON); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN BOOK _____, PAGE _____, OR AS REFERENCED HEREON; THAT THE RATIO OF PRECISION AS CALCULATED IS 1: _____; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED.

I, FURTHER CERTIFY PURSUANT TO G.S. 47-30 (f)(1)(d), THIS SURVEY IS OF ANOTHER CATEGORY AND IS AN EXEMPTION TO THE DEFINITION OF A SUBDIVISION.

WITNESS MY ORIGINAL SIGNATURE AND SEAL THIS THE _____ DAY OF _____, 20____.

SIGNED _____
 PROFESSIONAL LAND SURVEYOR No. L-####



NO.	DATE	DESCRIPTION
A	11/16/83	GS 47-30 AMENDED
B	12/13/98	GS 47-30 AMENDED ADD REVIEW OFFICER
C	05/06/00	GS 47-30 & NCBELS RULES AMENDED

APPROVED: PENDING

ANNEXATION MAP SURVEYOR'S CERTIFICATION USING TRADITIONAL ONLY SURVEY METHODS

CITY OF GREENVILLE, N.C.-ENGINEERING DEPT.

STD. NO.	REV.
10.17.1	C

COMMENTS:

THE SURVEYOR'S CERTIFICATION SHALL BE SUBSTANTIALLY IN THE FORM SHOWN FOR SURVEYS MADE BY BOTH TRADITIONAL AND GPS SURVEY METHODS. FOR TRADITIONAL ONLY SURVEYS USE MSDD STANDARD 10.16.1. THE SURVEYOR SHOULD REFER TO AND COMPLY WITH THE CURRENT NCBELS RULES 21 NCAC 56 .1600, "STANDARDS OF PRACTICE OF LAND SURVEYING IN NORTH CAROLINA", AND G.S. 47-30 FOR ANY RULE AMENDMENTS. www.ncbels.org

REQUIRED MINIMUM ACCURACY STANDARDS: (21 NCAC 56 .1603 & .1605)

HORIZONTAL: "URBAN LAND SURVEYS", CLASS "A" (1:10,000+)
 VERTICAL : "URBAN AND SUBURBAN VERTICAL CONTROL SURVEYS", CLASS "A"
 (Error not to exceed 0.10 times the square root of the numbers of miles run from reference station)

REFERENCE INFORMATION REQUIRED FOR GPS SURVEYS IN THE CERTIFICATION. (REF. NCBELS BOARD RULE 21 NCAC 56 .1607)

- (1) POSITIONAL ACCURACY: _____ (0.07 feet +/- 50PPM or less)
- (2) TYPE OF GPS FIELD PROCEDURE : _____
(STATIC, REAL-TIME KINEMATIC, REAL-TIME KINEMATIC NETWORK, ONLINE POSITION USER SERVICE)
- (3) DATE (S) OF SURVEY: _____
- (4) DATUM / EPOCH: _____
(HORIZONTAL (NAD83/86, NAD83(NSRS2007), etc.; VERTICAL (NAVD83))
- (5) PUBLISHED/FIXED-CONTROL STATIONS USED:

(INCLUDE: STATION NAMES, HORIZONTAL POSITION (NORTHING AND EASTING), ELEVATION DATUM AND EPOCH)
- (6) GEOID MODEL USED: _____
(GEOID03, GEOID06, GEOID09, etc.)
- (7) COMBINED GRID FACTOR(S): _____
- (8) UNITS: US SURVEY FOOT

NO.	DATE	DESCRIPTION
A	01/16/83	GS 47-30 AMENDED
B	02/13/98	GS 47-30 AMENDED ADD REVIEW OFFICER
C	05/06/09	GS 47-30 & NCBELS RULES AMENDED

SURVEYOR'S CERTIFICATION

I, _____, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL FIELD SURVEY PERFORMED UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK _____, PAGE _____, OR FROM BOOKS REFERENCED HEREON); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN BOOK _____, PAGE _____, OR AS REFERENCED HEREON; THAT THE RATIO OF PRECISION FOR TRADITIONAL SURVEY METHODS IS 1: _____; THAT THE GLOBAL POSITIONING SYSTEM (GPS) OBSERVATIONS WERE PERFORMED TO THE GEOSPATIAL POSITIONING ACCURACY STANDARDS, PART 2: STANDARDS FOR GEODETIC NETWORKS AT THE CLASS "A" ACCURACY CLASSIFICATION (95% CONFIDENCE) AND THE FOLLOWING INFORMATION WAS USING TO PERFORM THE GPS SURVEY:

POSITIONAL ACCURACY: _____
 TYPE OF GPS FIELD PROCEDURE: _____
 DATE(S) OF SURVEY: _____
 DATUM / EPOCH: _____
 PUBLISHED/FIXED-CONTROL MONUMENTS USED: _____

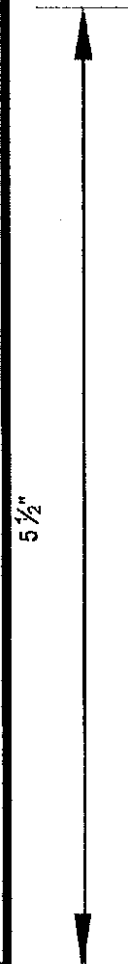
GEOID MODEL: _____
 COMBINED GRID FACTOR: _____
 UNITS: _____

THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED.

I, FURTHER CERTIFY PURSUANT TO G.S.47-30 (f)(11)(d), THIS SURVEY IS OF ANOTHER CATEGORY AND IS AN EXEMPTION TO THE DEFINITION OF A SUBDIVISION.

WITNESS MY ORIGINAL SIGNATURE AND SEAL THIS THE _____ DAY OF _____, 20____.

SIGNED _____
 PROFESSIONAL LAND SURVEYOR No. L-####



APPROVED: PENDING

ANNEXATION MAP SURVEYOR'S CERTIFICATION USING TRADITIONAL AND GPS SURVEY METHODS

CITY OF GREENVILLE, N.C.-ENGINEERING DEPT.

STD. NO.	REV.
10.17.2	C

REVIEW OFFICER'S CERTIFICATION

I, _____, A REVIEW OFFICER OF PITT COUNTY, N.C., CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING.

BY _____
REVIEW OFFICER

DATE: _____

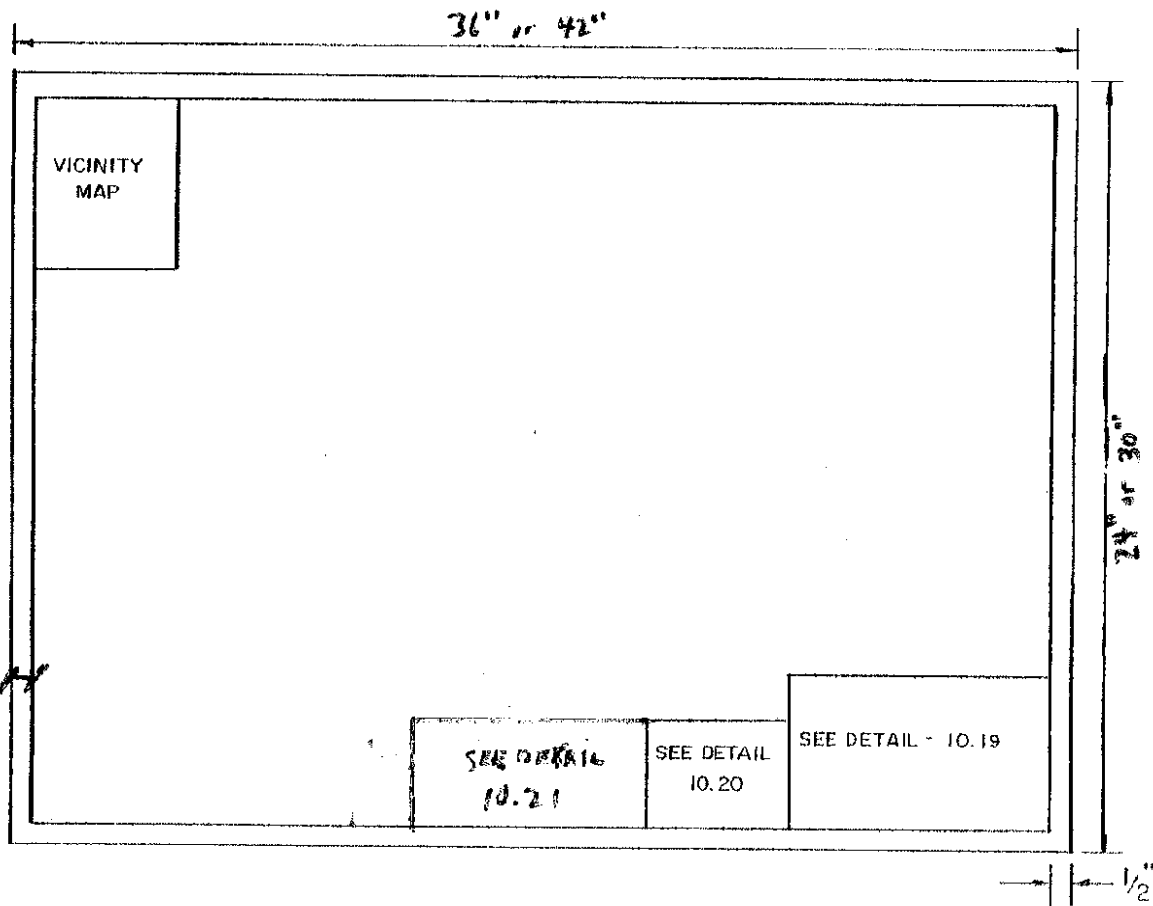
2" 3"

NO.	DATE	DESCRIPTION
A	5/06/09	NEW AS A SEPARATE CERTIFICATION

APPROVED: PENDING

ANNEXATION MAP REVIEW OFFICER'S CERTIFICATION
CITY OF GREENVILLE, N.C.-ENGINEERING DEPT.

STD. NO.	REV.
10.17.3	A



REVISIONS

NO.	DATE	DESCRIPTION

APPROVED: DATE SEPT 14, 1989

STANDARD PUD LAND USE PLAN LAYOUT

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
10.18	

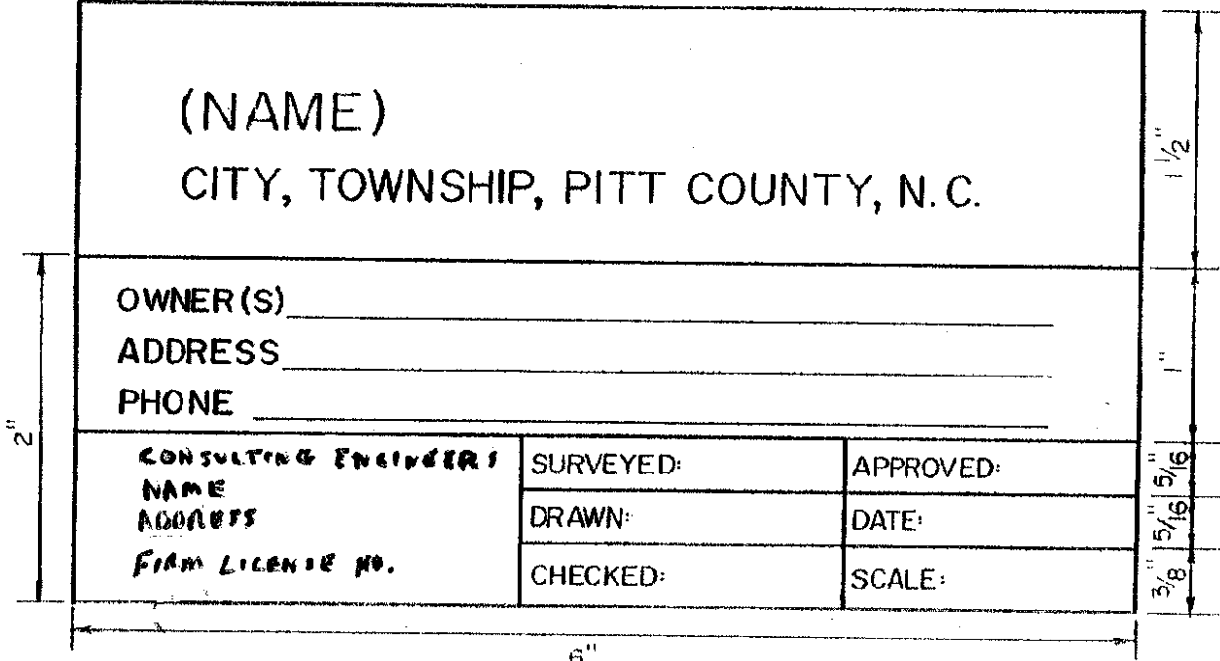
(NAME)
 CITY, TOWNSHIP, PITT COUNTY, N. C.

OWNER(S) _____
 ADDRESS _____
 PHONE _____

CONSULTING ENGINEER(S)
 NAME
 ADDRESS
 FIRM LICENSE NO.

SURVEYED:
 DRAWN:
 CHECKED:

APPROVED:
 DATE:
 SCALE:



REVISIONS		
NO.	DATE	DESCRIPTION

APPROVED: DATE SEPT 14, 1989

STANDARD TITLE BLOCK FOR PUD LAND USE PLAN

CITY OF GREENVILLE, N. C. — ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
10.19	

3 1/4"

APPROVAL	
THIS PLANNED UNIT DEVELOPMENT LAND USE PLAN, # _____ WAS APPROVED BY THE GREENVILLE PLANNING AND ZONING COMMISSION AT A MEETING HELD THE _____ DAY OF _____	
20 _____	
SIGNED _____	CHAIRMAN
SIGNED _____	CITY PLANNER

2 1/2"

REVISIONS

NO.	DATE	DESCRIPTION

APPROVED: DATE SEPT 14, 1989

STANDARD "APPROVALS" INFORMATION BLOCK

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
10.20	

COMMENTS:

THE SURVEYOR'S CERTIFICATION SHALL BE SUBSTANTIALLY IN THE FORM SHOWN FOR SURVEYS MADE BY TRADITIONAL SURVEY METHODS. FOR SURVEYS PERFORMED USING BOTH TRADITIONAL AND GPS SURVEYING METHODS USE MSDD STANDARD 10.21.2 THE SURVEYOR SHOULD REFER TO AND COMPLY WITH THE CURRENT NCBELS RULES 21 NCAC 56 .1600, "STANDARDS OF PRACTICE OF LAND SURVEYING IN NORTH CAROLINA", AND G.S. 47-30 FOR ANY RULE AMENDMENTS, www.ncbels.org

REQUIRED MINIMUM ACCURACY STANDARDS: (21 NCAC 56 .1603 & .1605)

HORIZONTAL: "URBAN LAND SURVEYS", CLASS "A" (1:10,000+)

VERTICAL : "URBAN AND SUBURBAN VERTICAL CONTROL SURVEYS", CLASS "A"

(Error not to exceed 0.10 times the square root of the numbers of miles run from reference station)

SURVEYOR'S CERTIFICATION

I, _____, CERTIFY THAT THIS PROJECT WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AND ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK _____, PAGE _____, OR FROM BOOKS REFERENCED HEREON); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN BOOK _____, PAGE _____, OR AS REFERENCED HEREON; THAT THE RATIO OF PRECISION AS CALCULATED IS 1: _____; THAT THIS TOPOGRAPHIC SURVEY WAS PERFORMED TO MEET FEDERAL GEOGRAPHIC DATA COMMITTED STANDARDS AS APPLICABLE; THAT THE TOPOGRAPHIC DATA WAS OBTAINED ON _____ (insert dates); THAT THE SURVEY WAS COMPLETED ON _____ (insert date); THAT THE CONTOURS SHOWN AS BROKEN LINES MAY NOT MEET THE STATED STANDARD; THAT VERTICAL CONTROL WAS ESTABLISHED AT THE SITE TO THE CLASS "A" STANDARD; AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE "STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA" (21 NCAC 56.1600).

WITNESS MY ORIGINAL SIGNATURE AND SEAL THIS THE _____ DAY OF _____, 20 ____.

SIGNED _____
PROFESSIONAL LAND SURVEYOR No. L-####

2 1/2"

5 1/2"

NO.	DATE	DESCRIPTION
A	05/06/03	NEW CERTIFICATION REQUIRED PER NCBELS RULES

APPROVED: PENDING

P.U.D. LAND USE PLAN SURVEYOR'S CERTIFICATION USING TRADITIONAL ONLY SURVEY METHODS

CITY OF GREENVILLE, N.C.-ENGINEERING DEPT.

STD. NO.	REV.
10.21.1	A

COMMENTS:

THE SURVEYOR'S CERTIFICATION SHALL BE SUBSTANTIALLY IN THE FORM SHOWN FOR SURVEYS MADE BY BOTH TRADITIONAL AND GPS SURVEY METHODS. FOR TRADITIONAL ONLY SURVEYS USE MSDD STANDARD 10.16.1. THE SURVEYOR SHOULD REFER TO AND COMPLY WITH THE CURRENT NCBELS RULES 21 NCAC 56 .1600, "STANDARDS OF PRACTICE OF LAND SURVEYING IN NORTH CAROLINA", AND G.S. 47-30 FOR ANY RULE AMENDMENTS. www.ncbels.org

REQUIRED MINIMUM ACCURACY STANDARDS: (21 NCAC 56 .1603 & .1605)

HORIZONTAL: "URBAN LAND SURVEYS", CLASS "A" (1:10,000±), GPS (0.07 feet +/- 50PPM or less)

VERTICAL: "URBAN AND SUBURBAN VERTICAL CONTROL SURVEYS", CLASS "A" (Error not to exceed 0.10 times the square root of the numbers of miles run from reference station)

REFERENCE INFORMATION REQUIRED FOR GPS SURVEYS IN THE CERTIFICATION. (REF. NCBELS BOARD RULE 21 NCAC 56 .1607)

- (1) POSITIONAL ACCURACY: _____ (0.07 feet +/- 50PPM or less)
- (2) TYPE OF GPS FIELD PROCEDURE: _____
- (3) DATE (S) OF SURVEY: _____
- (4) DATUM / EPOCH: _____
- (5) PUBLISHED/FIXED-CONTROL STATIONS USED: _____
- (6) GEOID MODEL USED: _____
- (7) COMBINED GRID FACTOR(S): _____
- (8) UNITS: US SURVEY FOOT

(STATIC, REAL-TIME KINEMATIC, REAL-TIME KINEMATIC NETWORK, ONLINE POSITION USER SERVICE)

[HORIZONTAL (NAD83/86, NAD83(NSRS2007), etc.; VERTICAL (NAVD88)]

INCLUDE: STATION NAMES, HORIZONTAL POSITION (NORTHING AND EASTING), ELEVATION, DATUM AND EPOCH)
(GEOID03, GEOID06, GEOID09, etc.)

SURVEYOR'S CERTIFICATION

I, _____, CERTIFY THAT THIS PROJECT WAS COMPLETED UNDER MY DIRECT AND RESPONSIBLE CHARGE FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK _____, PAGE _____, OR FROM BOOKS REFERENCED HEREON); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN BOOK _____, PAGE _____, OR AS REFERENCED HEREON; THAT THE RATIO OF PRECISION AS CALCULATED IS 1: _____; THAT THIS TOPOGRAPHIC SURVEY WAS PERFORMED TO MEET FEDERAL GEOGRAPHIC DATA COMMITTED STANDARDS AS APPLICABLE; THAT THE TOPOGRAPHIC DATA WAS OBTAINED ON _____ (insert dates); THAT THE SURVEY WAS COMPLETED ON _____ (insert date); THAT THE CONTOURS SHOWN AS BROKEN LINES MAY NOT MEET THE STATED STANDARD; THAT VERTICAL CONTROL WAS ESTABLISHED AT THE SITE TO THE _____ CLASS "A" STANDARD THAT A GLOBAL POSITIONING SYSTEM (GPS) SURVEY WAS PERFORMED TO ESTABLISH THE HORIZONTAL AND VERTICAL CONTROL FOR THE PROJECT; THAT THE (GPS) OBSERVATIONS WERE PERFORMED TO THE GEOSPATIAL POSITIONING ACCURACY STANDARDS, PART 2: STANDARDS FOR GEODETIC NETWORKS AT THE _____ CLASS "A" ACCURACY CLASSIFICATION (95% CONFIDENCE) AND THE FOLLOWING INFORMATION WAS USING TO PERFORM THE GPS SURVEY:

POSITIONAL ACCURACY: _____ TYPE OF GPS FIELD PROCEDURE: _____ DATE(S) OF SURVEY: _____
 DATUM / EPOCH: _____ GEOID MODEL: _____ UNITS: _____
 PUBLISHED/FIXED-CONTROL MONUMENTS USED: _____

AND THAT THIS MAP MEETS THE REQUIREMENTS OF "THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA" (21 NCAC 56.1600).

WITNESS MY ORIGINAL SIGNATURE AND SEAL THIS THE _____ DAY OF _____, 20 _____

SIGNED _____
 PROFESSIONAL LAND SURVEYOR No. I-#/#/#

2 1/2"

9 1/4"

NO.	DATE	DESCRIPTION
A	05/06/09	NEW CERTIFICATION REQUIRED PER NCBELS RULES

APPROVED: PENDING

P.U.D LAND USE PLAN SURVEYOR'S CERTIFICATION USING TRADITIONAL AND GPS SURVEY METHODS

CITY OF GREENVILLE, N.C.-ENGINEERING DEPT.

STD. NO.	REV.
10.21.2	A

RECORD DRAWINGS AND APPENDIX

Street and Storm Drainage "Record Drawings" Submittal Requirements

The following identifies the requirements, information, and format for submitting Record Drawings to the Engineering Division of the Public Works Department for review and approval. Record Drawings shall be submitted for any street and city storm drainage infrastructure proposed for maintenance by the City of Greenville. Record Drawings shall be submitted and approved prior to scheduling of the pre-final street acceptance inspection.

All Record Drawings shall include, but not necessarily limited to, the following:

- 1) Streets
 - a. Horizontal alignment of the centerline (changes to be noted)
 - b. Centerline final surface elevation:
 - i. intersections - crossing of street centerlines
 - ii. points of vertical inflection (pvi) - street centerline at point of inflection
 - iii. radius points of cul-de-sacs
 - iv. radius points for "hammerheads"
 - v. end of pavement construction (street centerline)
 - c. Width (Verification with approved plans)

- 2) Sidewalks (Verification with approved plans)
 - a. Width
 - b. Length
 - c. Thickness
 - d. Material
 - e. Location

- 3) Stormwater Pipes
 - a. Size
 - b. Shape
 - c. Material
 - d. Length
 - e. Slope

- 4) Structures (Junction Box, Drop Inlets, Catch Basins, Interference Boxes, Outlet Structure)
 - a. Rim/hood elevation
 - b. All pipe invert elevations
 - c. Material
 - d. Construction type (pre-cast, masonry block, or cast-in-place)
 - e. Interior bottom elevation of structure
 - f. Cover (lid/grate) dimensions

Page 2

- g. Weirs
 - i. Type
 - ii. Invert elevation
 - iii. Top of weir elevation
 - iv. Length

- 5) Level Spreaders / Flow Diffusers
 - a. Length
 - b. Material
 - c. Depth
 - d. Width

- 6) Flared End Sections
 - a. Material
 - b. Invert
 - c. Size
 - d. Outlet/Inlet Protection
 - i. Dimensions

Note:

- The "Record Drawings Submittal Process" outlines the submittal requirements and formats for submitting the Record Drawing information.
- Initial submittals may be submitted as either a contractor's red-lined mark-ups of approved construction drawings or an electronic submission of approved construction drawings with changes to the above "clouded" based on the contractor's red-lined mark-ups.
- Upon receipt of approval of the "Record Drawings", a licensed professional engineer with the State of North Carolina (either the engineer of record or one hired by the developer) will be required to submit final electronic documents with the following certification statement:

"I, _____, as a duly registered Professional Engineer in the State of North Carolina, hereby certify that construction of the street(s) and storm drainage infrastructure as presented on these Record Drawings has been completed in substantial accordance with the approved plans and specifications and that the information pertaining to said infrastructure provided by _____ and prepared under the supervision of _____ is correct to the best of my knowledge and belief."

Record Drawing Submittal Process

The submittal process for the review and approval of Record Drawings is as follows:

1) Submittal of Record Drawings

- a) Submit two (2) copies of either a contractor's "red-lined" mark-ups of approved construction drawings or an electronic submission of approved construction drawings with changes to the above "clouded" based on a contractor's "red-lined" mark-ups to the Engineering Division's Capital Improvement Section.
 - i) Only changes from the approved construction drawings need to be presented.
 - ii) The "red-lined" information will have a single line placed through it with the revised information or measurement placed next to it.
 - iii) If an electronic drawing is submitted in place of the contractor's red line drawings, then a single line will be drawn through the errant information. The correct information will be placed next to the errant information and a "cloud" will surround both.
 - iv) A licensed professional engineer with the State of North Carolina (either the engineer of record or one hired by the developer) shall also be responsible for reviewing the contractor's red line mark-ups of approved construction drawings prior to submittal to the City of Greenville.
- b) Submit storm drainage calculations
 - i) The engineer shall review the Record Drawings to determine and establish if any construction deviations will impact positive storm drainage flow throughout the system or place the system out of compliance with the City of Greenville requirements.
 - ii) If there is not positive drainage throughout the storm drainage system or if the system is not in compliance with the approved construction drawings or the City of Greenville requirements, the engineer must submit revised storm drainage calculations based on the record drawings for review and evaluation by the Engineering Division, as well as discuss the issue(s) with the City Engineer to determine a viable solution(s).
- c) Record Drawings shall be reviewed within ten (10) working days after date of receipt.
 - i) The benchmark(s) and datum used for measurements of the record drawings shall be conveyed and easily interpreted on the submitted drawings and shall be the same as used for the design of the original approved construction drawings and for construction.

Page 2

- (1) If the referenced benchmarks(s) used for design and construction and shown on the approved construction drawings have been compromised, new benchmark(s) must be reestablished to an accuracy on the site from published NGS monuments in accordance with the **Standards of Practice For Land Surveyors in North Carolina**, N.C.A.C. Title 21, Chapter 56, Section 1600, and by either conventional survey methods or Global Positioning Systems survey methods (21 NCAC 56.1607).

** Revisions to the record drawing submittals or requests for additional information may be required by the City of Greenville staff and may delay approval.*

- ii) Any exceptions or deviations from the approved construction drawings determined as acceptable by the City Engineer shall be noted on and incorporated as part of the final Record Drawings.

2) Upon approval of all Record Drawings

- a) One (1) copy shall be returned by the Engineering Division to the engineer with an approval stamp.
- b) The engineer shall submit an electronic copy of the drawing in "pdf" format with the following certification:

"I, _____, as a duly registered Professional Engineer in the State of North Carolina, hereby certify that construction of the street(s) and storm drainage infrastructure as presented on these Record Drawings has been completed in substantial accordance with the approved plans and specifications and that the information pertaining to said infrastructure provided by _____ and prepared under the supervision of _____ is correct to the best of my knowledge and belief."

- c) The engineer shall also be submit an electronic drawing in a version of AutoCAD "DWG" format compatible with the City of Greenville's current system.
 - d) The Owner's and Engineer's Certification of Completion forms shall be submitted to Engineering Division.
- 3) A pre-final street acceptance inspection shall be scheduled following approval and completion of all submittal requirements stated above.

Street Acceptance Timeline

The following is a summary of the Street Acceptance Process. Details on the Record Drawing Submittal Process can be found within the document named "Street and Storm Drainage Record Drawing Submittal Requirements". Details on the Final Inspection Process can be found within the document named "Final Inspections – Subdivision".

- 1) Developer completes all construction infrastructure proposed for continuous maintenance by the City of Greenville.*
- 2) The Record Drawing Submittal Process is initialized with the submission of the developer's contractors' red-lined drawings or electronic drawings with "clouded" changes to the approved construction drawings.
- 3) A licensed professional engineer with the State of North Carolina (either the engineer of record or one hired by the developer) will verify that the street(s) and storm drainage infrastructure as presented on these Record Drawings has been completed in substantial accordance with the approved plans and specifications. The engineer will review this information to confirm that the system meets the City of Greenville requirements. If the storm drainage system is not in compliance with the approved construction drawings or the City of Greenville's requirements, the engineer will submit revised storm drainage calculations based on the Record Drawings for review and evaluation by the Engineering Division, as well as discuss the issue(s) with the City Engineer to determine a viable solution(s).
- 4) Red-lined drawings and stormwater calculations are reviewed within ten (10) working days, unless additional information is required.
- 5) A pre-final inspection may be scheduled by the contractor with the City Engineer or his designee upon: approval of the Record Drawings; the submittal of the electronic Record Drawings with the certification statement by the engineer; and the submittal of the Owner's and Engineer's Certification of Completion forms.
- 6) After the pre-final inspection is performed and all punch-list items from the pre-final inspection are completed, the final inspection with the City Engineer may be scheduled – this will be coordinated through the City Engineer or his designee. Upon notification, the date of the final inspection will be scheduled within three (3) working days.
- 7) The Contractor has thirty (30) days to complete any additional items found deficient during the final inspection or a re-inspection will need to be performed.

(*) Developer is responsible for meeting all acceptance and inspection requirements for infrastructure proposed for continuous maintenance by the Greenville Utilities Commission.

Final Inspections - Subdivisions

INTRODUCTION

As subdivision development nears completion, it becomes necessary for the City of Greenville to conduct a "final inspection" of work performed in anticipation of street acceptance for continuous maintenance by the City. This inspection will encompass review of all aspects of subdivision construction to ensure compliance with approved plans, applicable regulations and standards. So as to maintain consistency and thoroughness in conduction of the "final inspection", the following guidelines are to be followed:

Single family, Industrial, Multi-family, and Innovative Subdivisions:

- A. Once the subdivision has been completed. Record Drawings of the subdivision (as identified in the Street and Storm Drainage Record Drawing Submittal Requirements) shall be completed and sent to the City Engineer or his designee for acceptance. These drawings will be reviewed within ten (10) working days after date of receipt.
- B. After the Record Drawings have been accepted by the City Engineer and the electronic Record Drawings with the certification statement by the Owner's engineer and the Owner's and Engineer's Certification of Completion forms have been submitted, the subdivision developer shall formally request a pre-final inspection through the Engineer Division's Subdivision Inspector, which may be presented in writing or by telephone. This will allow for the subdivision to be prepared for the final inspection to be conducted by City Engineer. After all items are identified in the pre-final process are addressed, the final inspection may be requested.
- C. It will be the responsibility of the subdivision developer or representative to formally request a final inspection through the City Engineer's Office. This shall be done in writing by the developer or representative thereof.
- D. The Subdivision Inspector will verify status of the involved subdivision to the City Engineer. It will be the Subdivision Inspector's responsibility to ensure the subdivision is constructed according to the approved preliminary subdivision plan and Manual of Standard Designs and Details, unless approved through an official variance or plan revision.
- E. Once the subdivision is determined ready for final inspection, the Subdivision Inspector will schedule the final inspection with the subdivision developer or his appointed designee at a time convenient for himself and the City Engineer. It will be the Subdivision Inspector's responsibility to notify the aforementioned persons of the confirmed inspection time within three (3) working days once it has been determined that the subdivision is ready for final inspection.
- F. Should the subdivision not be ready for inspection, the Subdivision Inspector will work with the developer to bring the involved subdivision into conformance. This will include, but not be limited to:
 1. Streets shall be swept clean up to the gutter line of the curb.
 2. Check asphalt pavement, all concrete ramps, sidewalks, and curb and gutter for cracks, alignment, and settlement. The developer is responsible for testing and providing test results to verify the specified thickness.
 3. Check storm drain manholes and catch basins for proper construction. Pipes within the manholes and catch basins shall be broken off flush with the wall of structure and the end of the pipe grouted and brushed smooth.
 4. Look through the pipe to check alignment and to determine if pipe is free of debris.
 5. Check headwalls, end walls, and flared end sections. Pipe to be broken flush with face of the wall and grouted and brushed smooth.

Page 2

6. Right of way monuments shall be placed as required.
 7. Right of way to be graded to the proper slope and seeded and mulched before a final inspection can be made.
 8. Detention basins shall be completed and functioning.
 9. All erosion control measures shall be removed in stabilized areas and maintained in non-stabilized areas.
 11. Barricades shall be placed as required.
 12. The area from the back of the curb to the right of way is to remain clear of all obstructions other than those permitted by existing policies.
- G. The final inspection will be performed under the supervision of the City Engineer or his designee. It will be the Subdivision Inspector's responsibility to be familiar with the approved plan, revisions, variances, bond status, and all other administrative details related to the involved development.
- H. It will be responsibility of the Subdivision Inspector to ensure that all deficiencies are properly noted on the Project Inspection Report Form. The form will be completed and signed by the appropriate persons.
- I. The Subdivision Inspector will present a copy of the completed Project Inspection Report Form to the Developer (or his representative) and the Contractor upon completion of the final inspection, but no later than the next working day.
- J. After each inspection, the developer will have a thirty (30) day limit to correct the deficiencies noted on the Project Inspection Report Form. Otherwise a re-inspection will be scheduled the day after the time limit expires and an updated Project Report Form will be processed.
- K. It will be the responsibility of the subdivision developer to notify the Subdivision Inspector once the deficiencies noted on the aforementioned Project Inspection Report Form are corrected.
- L. It will be the responsibility of the Subdivision Inspector to ensure the deficiencies are corrected and in conformance with the approved plan, the Manual of Standard Designs and Details, or as noted on the Project Inspection Report Form. Once the Subdivision Inspector is satisfied that the deficiencies have been corrected, he will so notify the City Engineer.
- M. The Subdivision Inspector will distribute the Acceptance of Physical Improvements Form to the Public Works Director, City Engineer and the designated representative for Greenville Utilities Commission. Upon return receipt of these forms, the City Engineer will begin proceedings for continuous maintenance, approval of involved record plats, and release of posted bonds. Permanent record will be maintained by the Engineering Division.

ENGINEER'S CERTIFICATE OF COMPLETION

To: City of Greenville, Engineering Division

From: _____

Date: _____

RE: Certification of Completion

Name of Development: _____

Project No: _____

I, the undersigned, hereby certify:

- 1 That based upon my periodic inspection, the construction of the street(s) and storm drainage infrastructure for the referenced development has been completed in substantial accordance with the approved plans and specifications on record with the City of Greenville dated _____. (Any exceptions must be approved by the City Engineer.)

- 2 That street(s) and storm drainage infrastructure for the referenced development have been installed as shown on the Record Drawings submitted to the City of Greenville Engineering Division.

SIGNATURE OF PROFESSIONAL ENGINEER

DATE

COMPANY

LICENSE NO.

SEAL

OWNER'S CERTIFICATE OF COMPLETION

To: City of Greenville, Engineering Division

From: _____

Date: _____

RE: Certification of Completion

Name of Development: _____

Project No: _____

I, the undersigned, hereby certify:

1. That I am the owner/or authorized representative of the referenced project.
2. That the street(s) and storm drainage infrastructure for the referenced development are in accordance with the approved construction drawings dated _____ and/or subsequent plan modifications as approved by the City of Greenville.
3. That I hereby convey ownership, upon acceptance by the City of Greenville City Council, of all street(s), easements, and storm drainage infrastructure to the City of Greenville as called for on the Record Drawings prepared by _____
(Name of Consulting Engineering)
4. That I/we, as the developer(s), guarantee the materials and workmanship as directly associated with, but not necessarily limited to, the installation of the street(s), storm drainage infrastructure, and restoration of any disturbed areas located within the rights-of-way for a period of one (1) year that are proposed for acceptance and maintenance by the City of Greenville. For the one (1) year warranty period, I/we, as the developer(s), shall be responsible for performing all repairs and restoration, as deemed necessary or required by the City, on the street(s), storm drainage infrastructure, and disturbed areas. The one year period shall begin at the date the street(s) and storm drainage infrastructure is formally accepted by the City Council of Greenville. If, for any reason that I/we, as the developer(s), cannot make repairs within a time period accepted by the City of Greenville, we will reimburse the City of Greenville for the cost of any repairs it that it deems necessary to make with its own forces including the cost of materials, labor, and equipment.
5. I further warrant to the City that all fees and liens have been paid by the owner such that there is not outstanding indebtedness remaining and holding the City harmless in each instance.
6. That I hereby convey all necessary easements for the street(s) and storm drainage system to the City of Greenville as recorded with the Pitt County Register of Deeds and as described in Plat Book _____ Page _____.

NAME (PRINT)

DATE

SIGNATURE/TITLE

SEDIMENTATION AND EROSION CONTROL

SEDIMENTATION AND EROSION CONTROL

EROSION CONTROL GUIDE

ANY EROSION CONTROL DEVICES OR METHODS SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES – EROSION AND SEDIMENTATION CONTROL PLANNING AND DESIGN MANUAL AND ALL AMENDMENTS. THE EROSION CONTROL DEVICES AND METHODS THAT FOLLOW ARE SUPPLEMENTAL TO THE STATE MANUAL.

EROSION CONTROL NOTES:

1. Scheduling of a preconstruction conference with the Engineering Division is required prior to initiating land disturbing activities. For scheduling please call (252) 329-4467. A 24-hour notice is required. No person may initiate a land disturbing activity before notifying the city of the date of the land disturbing activity.
2. No land disturbing activity beyond that required to install appropriate erosion control may proceed until erosion control measures are inspected and approved by the City.
3. Seeding and mulching or otherwise providing ground cover devices or structures sufficient to restrain erosion for all exposed slopes is required with 21 working days of completing any phase of grading.
4. Contractor shall inspect and maintain all erosion control devices on a weekly basis and after each major storm event. Failure to maintain erosion control devices may result in an issuance of stop work order or civil penalties up to \$5,000 per day of violation. Sites utilizing sediment traps must also specify a maximum depth of sediment prior to clean out.
5. The City Engineer reserves the right to require additional erosion control measures should the plan or its implementation prove to be inadequate.
6. Acceptance and approval of this plan is conditioned upon your compliance with Federal and State water quality laws, regulations and rules. In addition, local City and County ordinances or rules may also apply to this land disturbing activity. Approval by the City does not supersede any other permit or approval.
 - A. Please be advised of the rules to protect and maintain existing buffers along watercourses in the Neuse and Tar River basins. These rules are enforced by the Division of Water Quality (DWQ). Direct any questions about the applicability of these rules to your project to the regional water quality supervisor, Washington Regional Office at (252) 946-6481.

SEEDING AND MULCHING:

(East Crimp) (8-19-08)

S-2

The kinds of seed and fertilizer, and the rates of application of seed, fertilizer, and limestone, shall be as stated below. During periods of overlapping dates, the kind of seed to be used shall be determined. All rates are in pounds per acre.

All Roadway Areas

March 1 – August 31 September 1 – February 28

50#	Tall Fescue	50#	Tall Fescue
10#	Centipede	10#	Centipede
25#	Bermudagrass (hulled)	35#	Bermudagrass (hulled)
500#	Fertilizer	500#	Fertilizer
4000#	Limestone	4000#	Limestone

Waste and Borrow Locations

March 1 – August 31

September 1 – February 28

75#	Tall Fescue	75#	Tall Fescue
25#	Bermudagrass (hulled)	35#	Bermudagrass (unhulled)
500#	Fertilizer	500#	Fertilizer
4000#	Limestone	4000#	Limestone

Note: 50# of Bahiagrass may be substituted for either Centipede or Bermudagrass only upon Engineer's request.

Approved Tall Fescue Cultivars

2 nd Millennium	Duster	Magellan	Rendition
Avenger	Endeavor	Masterpiece	Scorpion
Barlexas	Escalade	Matador	Shelby
Barlexas II	Falcon II, III, IV & V	Matador GT	Signia
Barrera	Fidelity	Millennium	Silverstar
Barrington	Finesse II	Montauk	Southern Choice II
Biltmore	Firebird	Mustang 3	Stetson
Bingo	Focus	Olympic Gold	Tarheel
Bravo	Grande II	Padre Titan Ltd	
Cayenne	Greenkeeper	Paraiso	Titanium
Chapel Hill	Greystone	Picasso	Tomahawk
Chesapeake	Inferno	Piedmont	Tacer
Constitution	Justice	Pure Gold	Trooper
Chipper	Jaguar 3	Prospect	Turbo
Coronado	Kalahari	QuestUltimate	
Coyote	Kentucky 31	Rebel Exeda	Watchdog
Davinci	Kitty Hawk	Rebel Sentry	Wolfpack
Dynasty	Kitty Hawk 2000	Regiment II	
Dominion	Lexington	Rembrandt	

On cut and fill slopes 2:1 or steeper Centipede shall be applied at a rate of 5 pounds per acre and add 20# of Sericea Lespedeza from January 1 – December 21.

Fertilizer shall be 10-20-20 analysis. A different analysis of fertilizer may be used provided the 1-2-2 ratio is maintained and the rate of application adjusted to provide the same amount of plant food as a 10-20-20 analysis and as directed.

All areas seeded and mulched shall be tacked with asphalt. Crimping of straw in lieu of asphalt tack shall not be allowed on projects.

CRIMPING STRAW MULCH:

Crimping shall be required projects adjacent to any section of roadway where traffic is to be maintained or allowed during construction. In areas within six feet of the edge of pavement, straw is to be applied and then crimped. After the crimping operation is complete, an additional application of straw shall be applied and immediately tacked with a sufficient amount of undiluted emulsified asphalt.

Straw mulch shall be sufficient length and quality to withstand the crimping operation.

Crimping equipment including power source shall be subject to the approval of the Engineer providing that maximum spacing of crimper blades shall not exceed 8".

STORM DRAINAGE DESIGN

STORM DRAINAGE DESIGN

STORM DRAINAGE DESIGN REQUIREMENTS

In order that the Engineering Department may adequately review preliminary plats, construction plans and stormwater management plans, the following items should be indicated or accounted for on all plans submitted for approval:

- D-1 All storm drainage facilities shall comply with the requirements as stated in the Stormwater Management Program for the City of Greenville and the North Carolina Division of Water Quality Stormwater Best Management Practices Manual.
- D-2 Storm drainage pipes to be designed for a 10-year storm (post development), catch basins to be designed for a 2-year storm (post development).
- D-3 Minimum storm drainage size is 15 inches.
- D-4 Double basins are permitted.
- D-5 Minimum allowable velocity is 2.5 feet per second for concrete pipe or corrugated metal pipe. Maximum velocity is 10 feet per second within a system. Exiting velocities shall be in conformance with the Sedimentation and Erosion Control Ordinance of the City of Greenville or the latest version thereof.
- D-6 Drainage pipes which are located parallel or near parallel to public streets shall be contained within street rights-of-way. If this is not possible, dedicated storm drainage easements shall be required as defined on STD. NO. 15.01.a.
- D-7 In cases where two ditches intersect at perpendicular or obtuse angles, erosion control measures must be indicated.
- D-8 Headwalls or flared end pipe will be required at the influent and effluent of all pipe systems.
- D-9 Indicate all ditch sections with centerline elevations at least every 50' and cross sections if there is a significant change in the profile.
- D-10 Indicate topography, ditches, pipes, swales, and drainage easements which are adjacent to the proposed project.
- D-11 Catch basins shall be placed such that the maximum depth of flow in the gutter shall be 0.50 feet on private, marginal access, and minor streets. The maximum depth of flow on collector streets and thoroughfares shall be 0.30 feet.

GENERAL NOTES:

~~1. FOR STREAMS CARRYING 500 ACRES OR MORE OF SURFACE RUNOFF, THE EASEMENT REQUIREMENT IS TO BE THE WIDTH OF THE STREAM FROM TOP OF BANK TO TOP OF BANK, PLUS (+) 10' ON EACH SIDE OF STREAM. (45' MINIMUM WIDTH)~~

1.X FOR OPEN CHANNELS THE MINIMUM EASEMENT MUST CONTAIN THE WIDTH OF THE STREAM FROM TOP OF BANK TO TOP BANK, PLUS (+) 10' ON EACH SIDE OF STREAM.

2.X WIDER EASEMENT WIDTHS MAY BE REQUIRED FOR PIPE DEPTHS GREATER THAN ~~TEN~~ FEET. EIGHT

3.X PIPE SYSTEMS AND OPEN CHANNELS ON PRIVATE PROPERTY SHALL BE PLACED IN A STORM DRAINAGE EASEMENT.

conveying stormwater from multiple properties

Easement Requirements for Open Storm Drainage Channels

Area in Acreage	Easement Requirement
0-45 ac.	20'
45-120 ac. or 1/2'	30'
120-500 ac.	40'
500 ac +	see note

Easement Requirements for Storm Drain Pipe

Pipe Size	Easement Requirement
15"	15'
18"	15'
24"	15'
30"	20'
36"	20'
42"	25'
48"	25'
54"+	30' MIN (VARIES)

NOT TO SCALE

MINIMUM DRAINAGE EASEMENT REQUIREMENTS FOR STORM DRAIN PIPES AND OPEN CHANNELS

316 DE REC
13.01A

- D-12 Will all storm drainage designs, the following design data must be submitted for each run of pipe.
- a. Area drained
 - b. Design storm intensity adjusted for duration
 - c. Design flow
 - d. Coefficient of runoff
 - e. Grade of pipe
 - f. Type of pipe
 - g. Size of pipe
 - h. Velocity of flow
 - i. Maximum capacity
 - j. Hydraulic grade lines
- D-13 Not more than one acre may drain in the street at a single concentrated point.
- D-14 Slotted drains are permissible (STD. NO. 25.03) with prior approval of the Engineering Division.
- D-15 The minimum grade for any storm drainage pipe shall be 0.3%. In the event that this requirement cannot be met, the City Engineer may approve an alternate provided the minimum velocity of 2.5 ft/sec is met.
- D-16 Any storm drainage system to be city-maintained shall have "Record Drawings" submitted and approved prior to scheduling a pre-final street acceptance inspection. All "Record Drawings" for storm drainage infrastructure shall include, but not necessarily limited to, the information as identified in the *Street and Storm Drainage "Record Drawings" Submittal Requirements*.
- D-17 Maximum distance between manholes/boxes located on the same trunk line shall be 300'.

REQUIREMENTS FOR INSTALLATION OF REINFORCED CONCRETE PIPE

1. AASHTO Designation M86 (or the latest revision) shall apply to all reinforced concrete pipe.

2. All pipe installed within the street right-of-way shall be Class III or higher.
3. The appropriate sealant shall be applied to both inside and outside of joints of pipe 24" in diameter and larger. Joints shall be wiped smooth.
4. A roughness coefficient of 0.013 ("n" factor) shall be used in the design of reinforced concrete pipe drainage systems.

REQUIREMENTS FOR INSTALLATION OF CORRUGATED METAL PIPE

1. AASHTO Designation M196 or the latest revision thereof shall apply.
2. All corrugated metal pipe shall be aluminum unless coating of steel pipe is approved by the City Engineer.
3. Coupling bands shall be used at all joints and shall be of a size specified by the manufacturer in accordance with the pipe design. Bands shall conform to AASHTO Designation M196. Bands to be of Hugger-Type or approved equal.
4. Pipes shall meet the NC-DOT specifications for loading requirements.
5. A roughness coefficient of 0.024 ("n" factor) shall be used in the design of corrugated metal pipe drainage systems.

COMPACTION AND BACKFILLING

Compaction for reinforced concrete pipe and corrugated metal pipe to be in accordance with NC-DOT Standard Specifications for Roads and Structures.

STORM WATER DESIGN CALCULATIONS

RUNOFF DETERMINATION:

There are two acceptable methods: (1) Rational Method (good for areas less than 20 acres and minor design systems) and (2) Soil Conservation Service Method using Curve Numbers.

DETERMINATION OF DISCHARGE:

The most widely used method for determining discharge in storm drainage is the Rational Method and shall be the method used for the purpose of this manual. It should be noted, however, that this method should be used with caution since it does not adequately recognize all of the complications of the runoff process. The basic formula may be reduced to "Q=CIA", where:

Q = Discharge, in cubic feet per second.

C = "Runoff" coefficient, unitless

I = Intensity of rainfall, inches per hour

A = Drainage basin area, acres.

These factors are explained in detail in the following paragraphs.

C.....RUNOFF COEFFICIENT

The runoff coefficient is the proportion of the total rainfall which runs off the basin area into the drainage system. The runoff coefficients to be used for the Greenville area are listed on Chart No. SD-3.

I.....INTENSITY

Values for the rainfall intensity for the Greenville area may be derived from Chart No. SD-1 and SD-2. The design procedures for runoff for the City of Greenville shall be based on a 10-year rainfall and the time of concentration (Tc).

$$T_c = [(L^3/H)^{0.385}]/128$$

L = Maximum length of travel time of water (feet)
H = Difference in elevation between the most remote point on the basin and the outlet (feet)

- NOTES: Overland flow, grass, multiply Tc by 2.
Overland Flow, concrete or asphalt, multiply Tc by 0.4
Concrete channel, multiply Tc by 0.2

A.....DRAINAGE BASIN AREA

The drainage basin area can be calculated with the use of topographic maps by marking the basin ridgeline and planimentering the designated areas. When marking the basin ridgeline, it should be remembered that water runoff flows perpendicular to contour lines.

Q.....DISCHARGE

After determining the coefficient of runoff, rainfall intensity, and drainage basin area; the discharge can be computed by the use of rational formula "Q=CIA".

CATCH BASIN DESIGN

DESIGN PROCEDURE:

The following procedure for the location and design of catch basins for the City of Greenville is based on the actual hydraulic characteristics of the standard catch basin for the City as depicted in Chart No. SD-4. Catch basin design shall be based on a t-year storm. Double basins are permitted. The catch basin data sheets, Chart SD-5 or approved equivalent shall be completed and submitted with each plan.

1 – DETERMINE DRAINAGE LIMITS:

The drainage limits should be calculated by the use of topographic maps by marking the basin ridgeline. It should be noted that the centerline of the streets will usually represent a ridgeline on a normal crown.

2 – DETERMINE DEPTH OF FLOW:

The depth of flow allowed is the depth of the water in the gutter line which will be tolerated in flooding conditions.

3 – DETERMINE LONGITUDINAL SLOPE (S_L) OF THE STREET:

Determine the slope of the street in percent.

4 - DETERMINE TRANSVERSE SLOPE (S_T) OF THE STREET:

This can be determined from the typical section of the street and will usually consist of the vertical distance from the gutter line to the crown of the street divided by the horizontal distance from the gutter line to the crown of the street.

5 - DETERMINE CAPACITY OF THE BASIN:

The capacity of the basin can be determined by the chart on Chart No. SD-4. Enter the bottom of the chart with the transverse slope and draw a vertical line to the longitudinal slope. Then, using this as a turning point, draw a horizontal line to intersect the "K" factor. Then use the equation:

$$Q = KD^{1.67}, \text{ where:}$$

Q = the capacity of the basin in cubic feet per second

K = a dimensionless factor determined from said chart

D = the depth of flow in the gutter line in feet

With this information, complete columns 1, 2, 3, and 4 of the catch basin design data sheet (Chart SD-5).

6 – DETERMINE AREA SERVED BY THE BASIN:

STEP NO. 1: Assume a trial coefficient and a trial intensity for the design area and place these figures in columns 5 and 6 of the data sheet. At this point, an approximate area served by the catch basin may be determined by dividing the catch basin capacity by the trial coefficient of runoff and the trial intensity (column 5 x column 6). This derived area should be placed in column 7 in the design data sheet. This gives an approximate area served by the catch basin. With this area and topographic lines, a trial location of the proposed basin should be made.

STEP NO. 2: To insure that the location as derived in Step No. 1 is appropriate and that the trial coefficient of runoff and trial intensity are in order, the runoff for the area determined by the proposed location of the basin should be calculated. This is accomplished by calculating the runoff as established in the storm water design procedures listed in the previous section and completing columns 8 through 13. If column 13 varies by more than 10% from column 7, this would indicate that the trial coefficient and/or trial intensity were not in line with the actual coefficient and intensity, and therefore, the basin is not properly located. The procedure in Step No. 1 should then be repeated and then adjust the trial coefficient of runoff (col. 5) and trial intensity (col. 6) accordingly. Once all the basins have been properly located, the pipe design associated with the basins may be completed according to the PIPE SYSTEM DESIGN PROCEDURES listed in this chapter.

CULVERT DESIGN

DESIGN PROCEDURE:

There are two steps in storm drainage design. The first step is to determine the amount of water discharged at the point of design. This can be accomplished by using the "Storm Water Design" section of this manual. The second step is the actual selection of a size for the structure, based on the calculated discharge.

DETERMINE OF STRUCTURE SIZE:

There are essentially two types of control which must be considered in every culvert design situation: inlet control and outlet control. Both types of control must be considered separately in the design of culverts.

INLET CONTROL:

Inlet control exists in cases where the culvert is not flowing full. The inlet control charts (SD-a through SD-f) have headwater depth as the controlling criteria. Headwater depth is the depth of the water on the upstream side of the culvert, expressed in diameters of the pipe under study.

The maximum allowable headwater is limited by either the controlling flood elevation or existing or proposed development. However, the maximum headwater depth should not exceed 1.2 times the open height of the culvert for a 10-year storm.

OUTLET CONTROL:

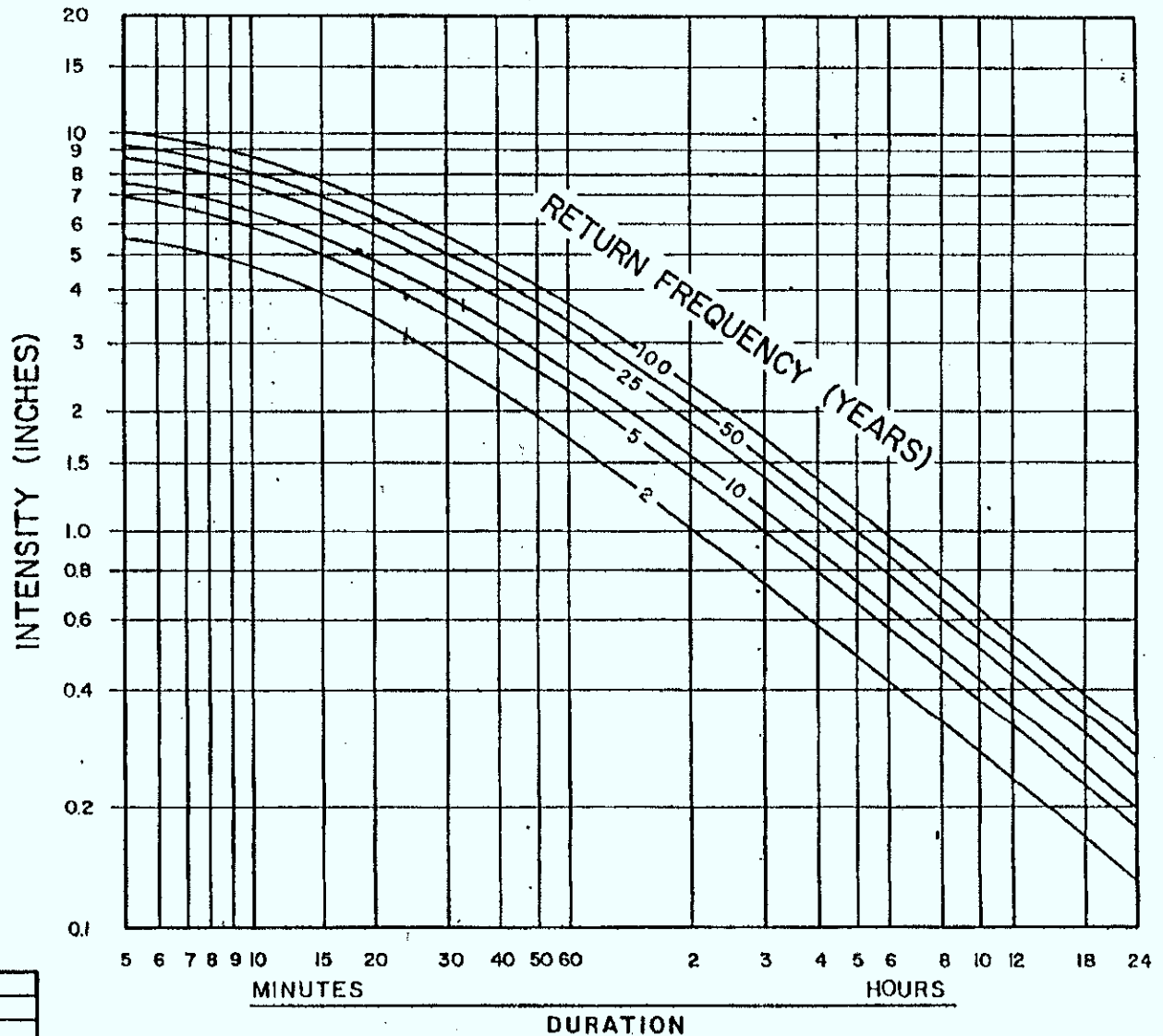
Outlet control exists in cases where the culvert is flowing full. Before using the outlet control charts (SD-g through SD-m), it is necessary to determine the coefficient of entrance loss "Ke". These values are found in the coefficient of entrance loss table on Chart No. SD-7.

A controlling criteria for outlet control is tailwater depth, which is represented in the tables by the amount of "head". Head is the difference in elevation of the water surface on the upstream side of the culvert and the downstream water surface. The tailwater elevation is determined by downstream conditions and may be calculated if these conditions are known. In any case, the tailwater elevation will not be below the design year flood elevation at the outlet. If flood data is not available, the assumption may be made that the tailwater elevation is the crown of the culvert.

PIPE SYSTEM DESIGN

Once all the catch basins have been located according to the catch basin design procedures, the next step is to design the pipe systems to serve the basins. For the purpose of this manual and for the City of Greenville, pipes within the system shall be designed to carry a 10-year storm (post development). The sizing of these pipes shall be based on the Manning Equation. It should be noted that the velocities for the pipes shall be maintained between 2.5 feet per second and 10 feet per second. In addition, points of discharge should be treated in such a manner to conform with the State and local ordinances on velocity controls. This design is based on the sum of the individual areas served by the catch basins and not the sum of the capacities of each basin. The Storm Drainage Design Data Sheet, Chart SD-6, or an approved equivalent, should be completed and submitted with each plan.

CHART SD-1



REVISIONS		
NO.	DATE	DESCRIPTION

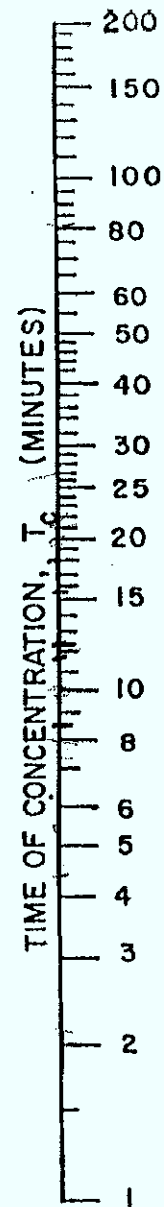
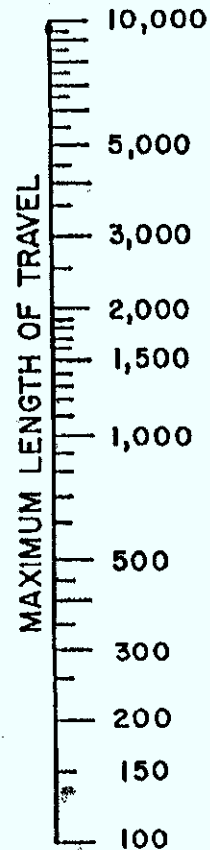
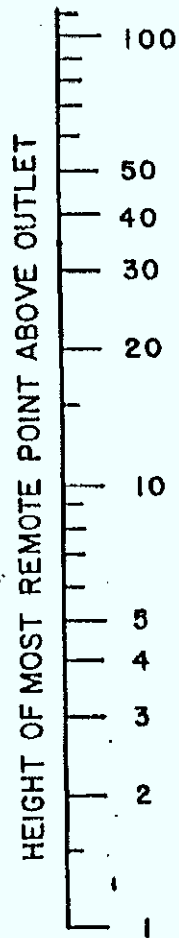
NOTE: ASSUME TIME OF CONCENTRATION EQUALS DURATION

APPROVED: DATE May 8, 1980

RAINFALL INTENSITY VS. DURATION
CITY OF GREENVILLE, N.C.—ENGINEERING DEPT.

STD. NO.	REV.
1512	

CHART SD-2



USE NOMOGRAPH T_c FOR NATURAL BASINS WITH WELL DEFINED CHANNELS FOR OVERLAND FLOW ON BARE EARTH, AND FOR MOWED GRASS ROADSIDE CHANNELS.

FOR OVERLAND FLOW, GRASSED SURFACES, MULTIPLY T_c BY 2.

FOR OVERLAND FLOW, CONCRETE OR ASPHALT SURFACES, MULTIPLY T_c BY 0.4

FOR CONCRETE CHANNELS, MULTIPLY T_c BY 0.2

$$T_c = \left(\frac{L^3}{H} \right)^{0.385} / 128$$

REVISIONS

NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 1980

RUNOFF COEFFICIENTS

LAWNS:	(1) SANDY SOILS	FLAT < 2%	0.10
		AVERAGE 2% - 7%	0.15
		STEEP > 7%	0.20
(2) HEAVY SOILS		FLAT < 2%	0.15
		AVERAGE 2% - 7%	0.20
		STEEP > 7%	0.30

WOODS, CEMETERIES, PARKS	0.20
UNIMPROVED AREAS (PASTURE, WADP, ETC.)	0.25
PLAYGROUNDS	0.30

RESIDENTIAL:	(1) APARTMENTS AND TOWNHOUSES	0.70
	(2) LOT SIZE < 1/4 ACRE (R-6, R-9)	0.60
	(3) LOT SIZE < 1/3 ACRE (R-15)	0.55
	(4) LOT SIZE < 1/2 ACRE (R-20)	0.50
	(5) LOT SIZE < 1.0 ACRE	0.40
	(6) LOT SIZE > 1.0 ACRE	0.35

INDUSTRIAL:	(1) LIGHT	0.70
	(2) HEAVY	0.80

COMMERCIAL:	(1) DOWNTOWN, STRIP, MALL, PAVEMENT AREAS	0.95
	(2) CENTER	0.90
	(3) NEIGHBORHOOD	0.85

ROOF: 0.95
 PAVEMENT: (1) Asphalt or concrete. 0.90
 (2) Brick 0.80
 GRAVEL: 0.30

Keep 3 Categories.

REVISIONS		
NO.	DATE	DESCRIPTION

CHART SD-3

APPROVED: DATE May 8, 1980

RUNOFF COEFFICIENTS

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

STD. NO.	REV.
1514	

Item # 13

CAPACITY OF BASIN =

$$Q = K D^{5/3}$$

WHERE:

Q = C.F.S.

D = Depth of gutter flow
in feet

"K"

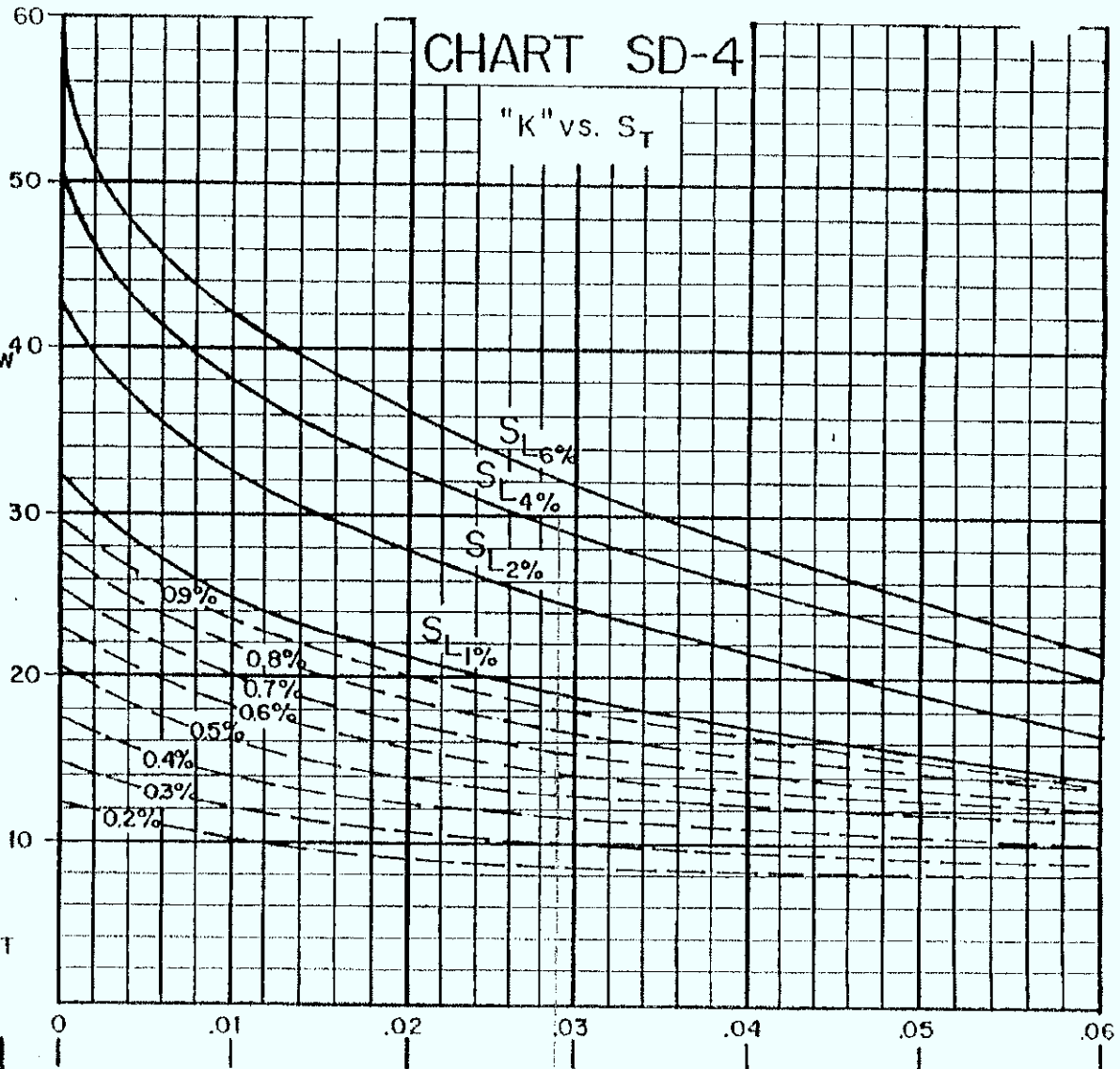
S_L = LONGITUDINAL GUTTER
SLOPE

S_T = TRANSVERSE GUTTER
SLOPE

K = GRATE INLET COEFFICIENT

CHART SD-4

"K" vs. S_T



--- INDICATES INTERPOLATED VALUES

S_T = VERTICAL DISTANCE FROM CROWN TO GUTTER LINE DIVIDED BY DISTANCE FROM CREST OF ROADWAY (USUALLY $\frac{1}{2}$) TO GUTTER LINE.

REVISIONS		
NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 1980

STANDARD CATCH BASIN INLET CAPACITY

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
15.15	

CATCH BASIN SIGN DATA SHEET

PROJECT _____ COMPUTED BY _____ DATE _____, 19____

LOCATION _____ CHECKED BY _____ DATE _____, 19____

STORM FREQUENCY _____ YEARS

CATCH BASIN NO.	1 2 3 4 5 6 7 8 9 10 11 12 13													
	LONGITUDINAL STREET GRADE (SL)%	TRANSVERSE STREET GRADE (ST)	MAX. DEPTH OF FLOW IN GUTTER (FT.)	CAPACITY OF BASIN (C.F.S.) $Q = K D^{5/3}$	TRIAL COEF. OF RUNOFF	TRIAL INTENSITY (in)	DERIVED AREA $= \frac{4}{5 \times 6}$	LENGTH OF DRAINAGE AREA	HEIGHT ABOVE MOST REMOTE POINT	COEF. OF RUNOFF	TIME OF CONCENTRATION (t_c)	ACTUAL INTENSITY (in)	MAX. ALLOWABLE DRAINAGE AREA $= \frac{10 \times 12}{4}$	REMARKS (COLUMN 13 MUST BE W/N 10% OF COLUMN 7)

REVISIONS

NO.	DATE	DESCRIPTION

CHART SD-5

APPROVED: DATE May 8, 1980

STORM DRAINAGE DESIGN DATA SHEET

PROJECT _____ DESIGNED BY _____ DATE _____, 19 _____
 LOCATION _____ CHECKED BY _____ SHEET _____ OF _____
 STORM FREQUENCY _____ YEAR

LOCATION		AREA (ACRE)		C	INTENSITY			Q-CIA (C.F.S. REQD)	PIPE DATA						REMARKS
FROM	TO	SUB TOTAL	TOTAL		H	L	I		TYPE	N	S%	LENGTH	SIZE	VEL. (OF Q REQD)	

REVISIONS		
NO.	DATE	DESCRIPTION

- C - RUNOFF COEFFICIENT
- H - HEIGHT ABOVE INLET OF MOST REMOTE POINT
- L - LENGTH OF DRAINAGE AREA
- I - INTENSITY OF STORM (INCHES)
- N - COEFFICIENT OF FRICTION
- S - SLOPE (%)
- Q - FLOW (C.F.S.)

NOTE: DESIGN IS BASED ON THE SUM OF THE AREAS AND NOT THE SUM OF THE DISCHARGES.

CHART SD-6

APPROVED: DATE May 8, 1980

CITY OF GREENVILLE, N.C. - ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
15.17	

COEFFICIENT OF ENTRANCE LOSS, "Ke"

TYPE OF STRUCTURE AND DESIGN OF ENTRANCE	COEFFICIENT Ke:
Pipe, Concrete	
Projecting from fill	0.5
Headwall or headwall and wingwalls	0.5
Mitered to conform to fillslope	0.7
Pipe or Pipe-Arch, Corrugated Metal	
Projecting (no headwall)	0.9
Headwall or headwall and wingwalls	0.5
Mitered to conform to fillslope	0.7
Box Reinforced Concrete	
Headwall	0.5
Wingwall at 30 degrees to 75 degrees to barrel	0.4
Wingwalls at 10 degrees to 25 degrees to barrel	0.5

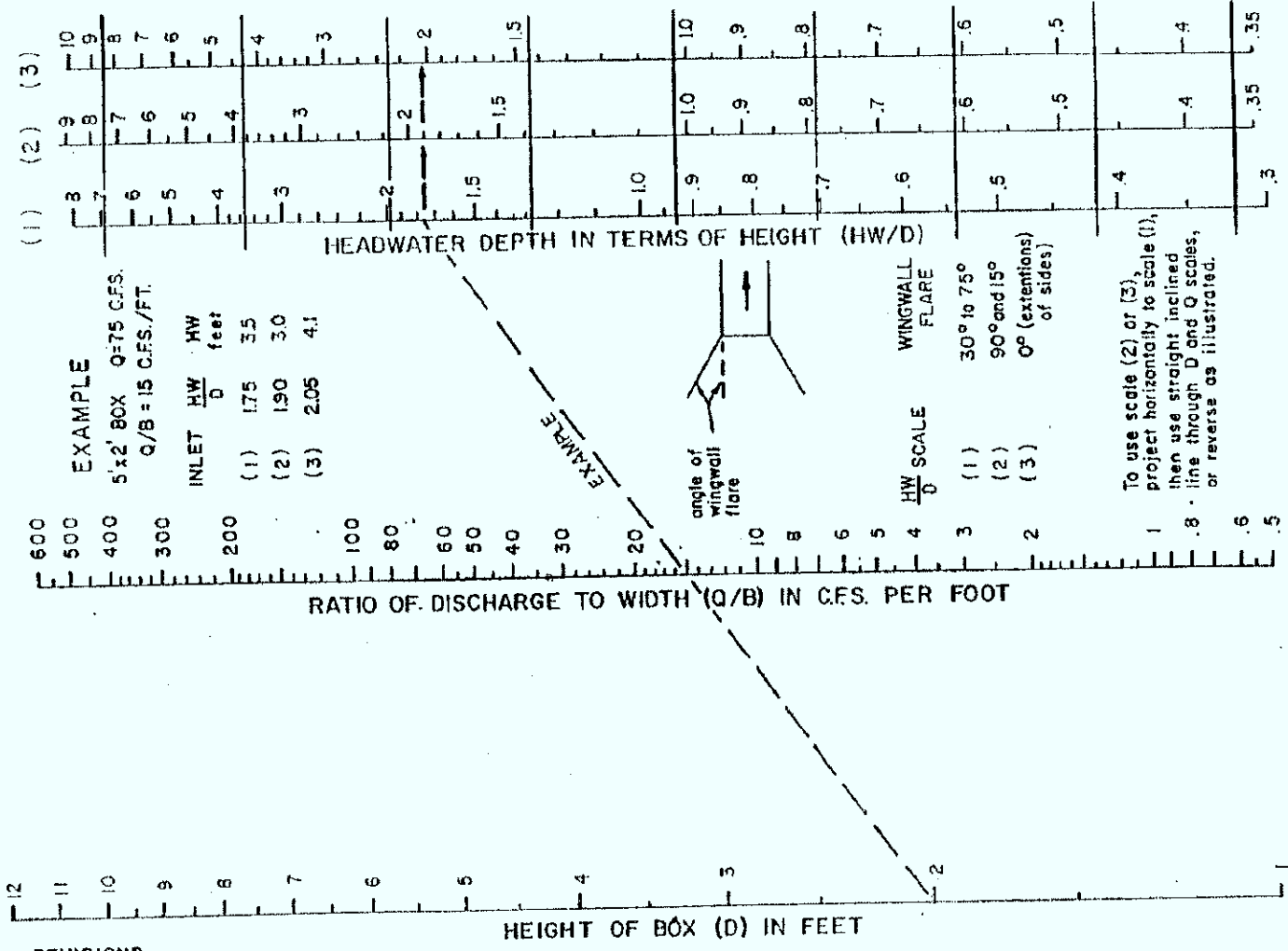
REVISIONS

NO.	DATE	DESCRIPTION

CHART SD-~~11~~7

APPROVED: DATE May 8, 1980

CHAR SD-a



EXAMPLE
5'x2' BOX Q=75 C.F.S.
Q/B = 15 C.F.S./FT.

INLET	HW/D	HW feet
(1)	1.75	3.5
(2)	1.90	3.0
(3)	2.05	4.1

REVISIONS		
NO.	DATE	DESCRIPTION

HEADWATER DEPTH FOR BOX CULVERTS WITH INLET CONTROL

APPROVED: DATE May 8, 1980

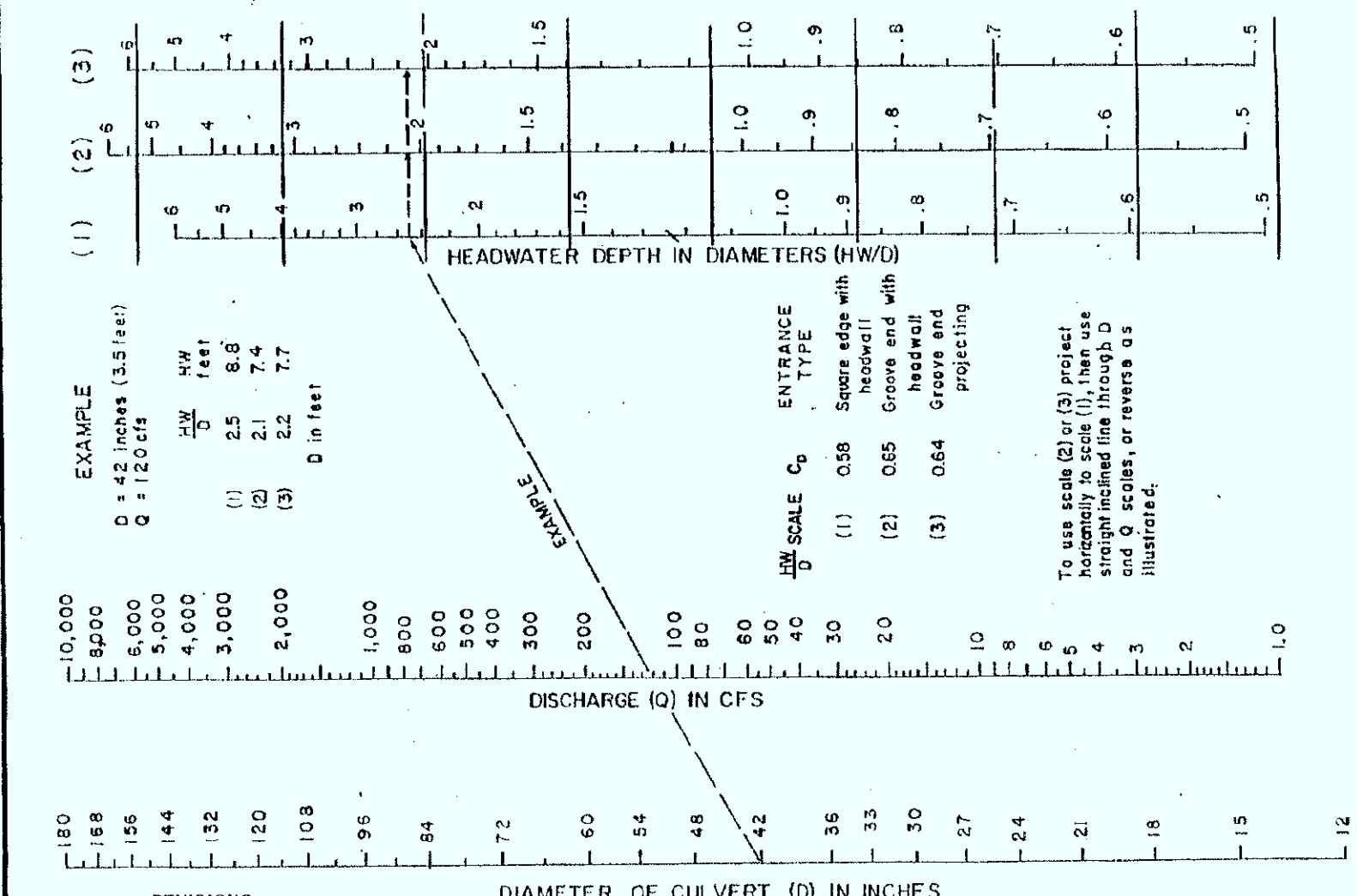
CULVERT DESIGN - INLET CONTROL
CITY OF GREENVILLE, N.C. - ENGINEERING DEPT.

STD. NO.	REV.
15.23	

Item # 13

BUREAU OF PUBLIC ROADS - JAN. 1963

CHA SD-b



EXAMPLE
 D = 42 inches (3.5 feet)
 Q = 120 cfs

D in feet	H/W	HW
(1) 2.5	8.8	feet
(2) 2.1	7.4	
(3) 2.2	7.7	

H/W SCALE	C _D	ENTRANCE TYPE
(1)	0.58	Square edge with headwall
(2)	0.65	Groove end with headwall
(3)	0.64	Groove end projecting

To use scale (2) or (3) project horizontally to scale (1), then use straight inclined line through D and Q scales, or reverse as illustrated;

REVISIONS		
NO.	DATE	DESCRIPTION

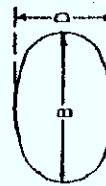
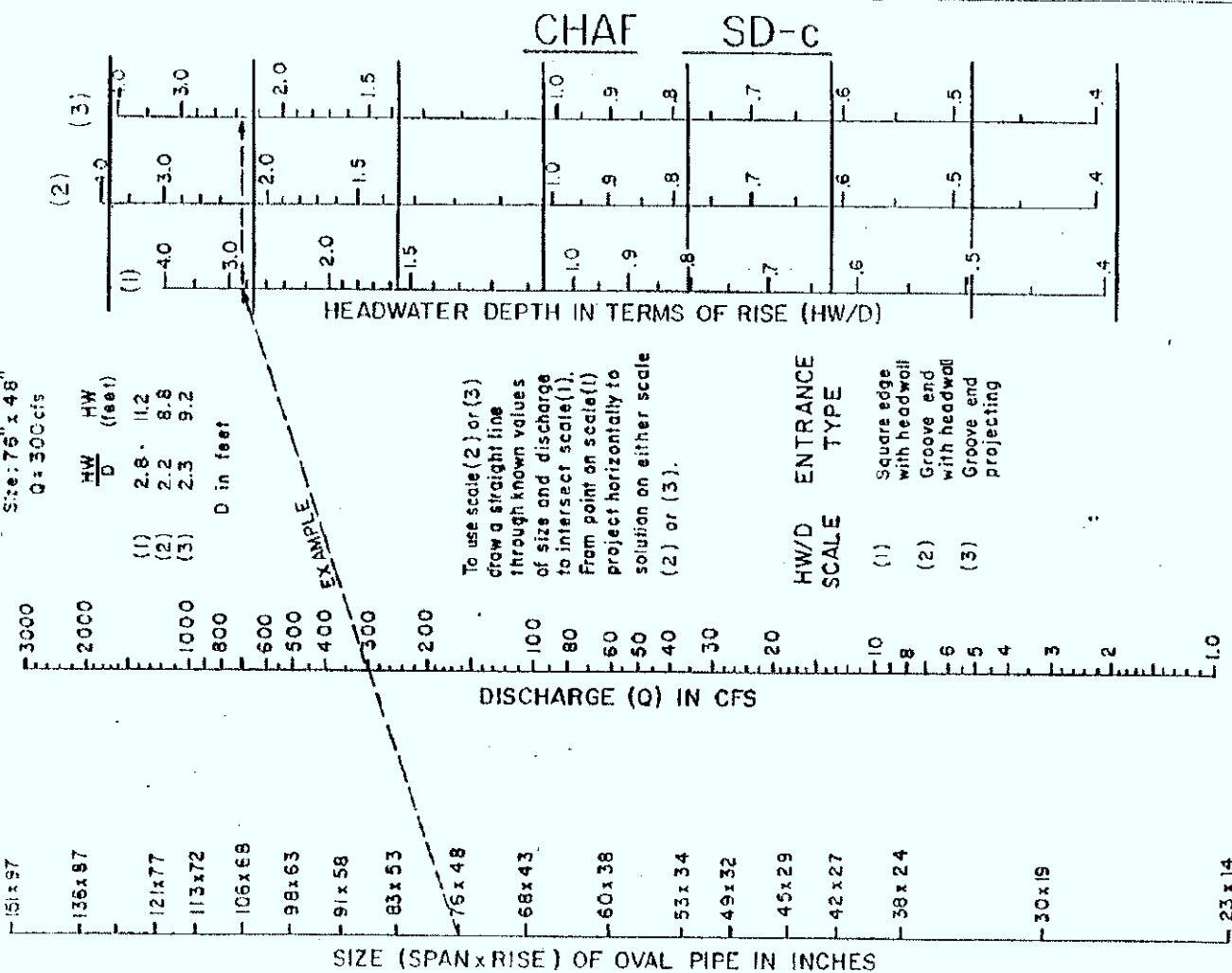
HEADWATER DEPTH FOR CONCRETE PIPE CULVERTS WITH INLET CONTROL

APPROVED: DATE May 8, 1960

STD. NO.	REV.
15.24	

REVISIONS		
NO	DATE	DESCRIPTION

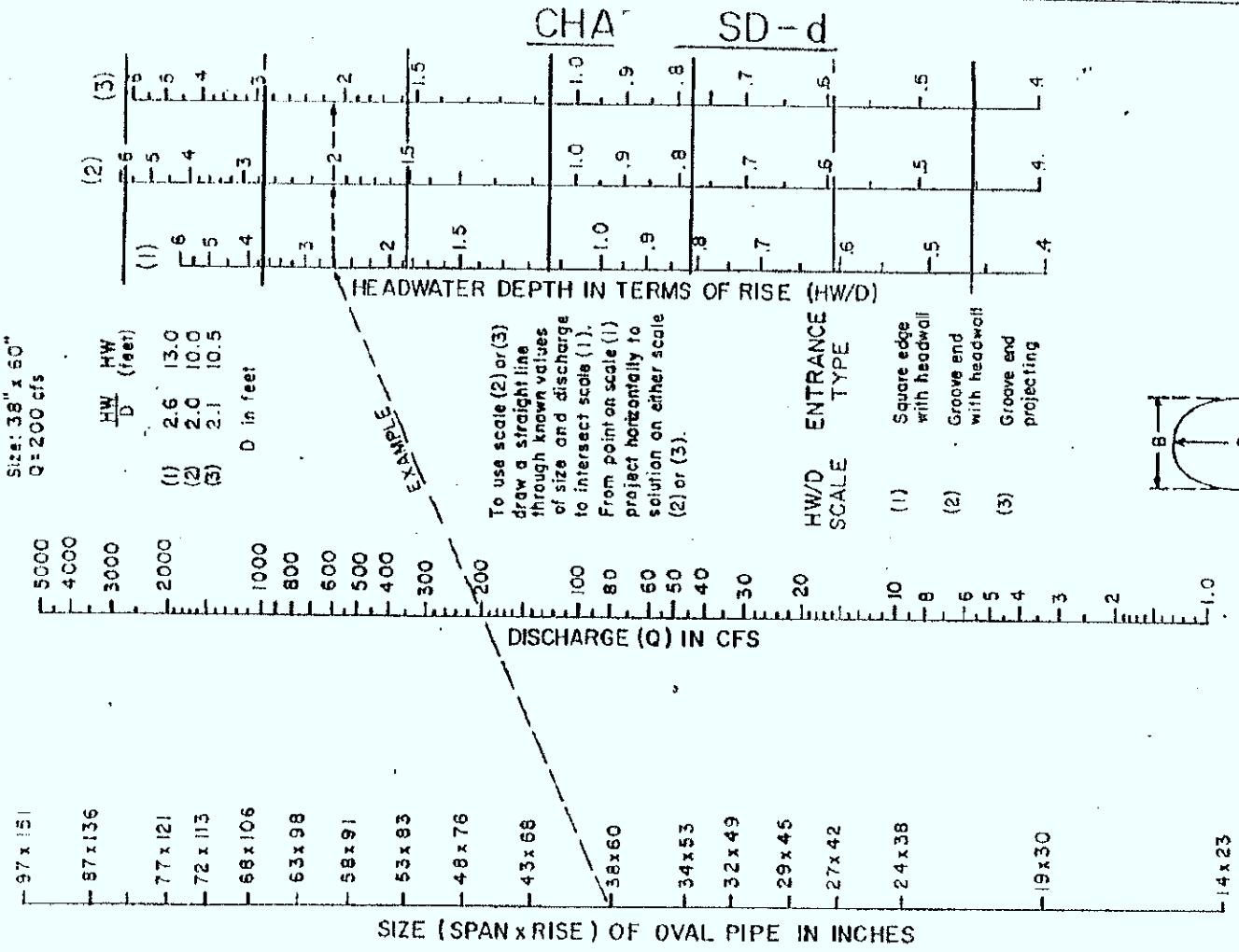
HEADWATER DEPTH FOR
 OVAL CONCRETE PIPE CULVERT'S
 LONG AXIS HORIZONTAL
 WITH INLET CONTROL



BUREAU OF PUBLIC ROADS - JAN. 1963

APPROVED: DATE May 6, 1960

REVISIONS		
NO.	DATE	DESCRIPTION

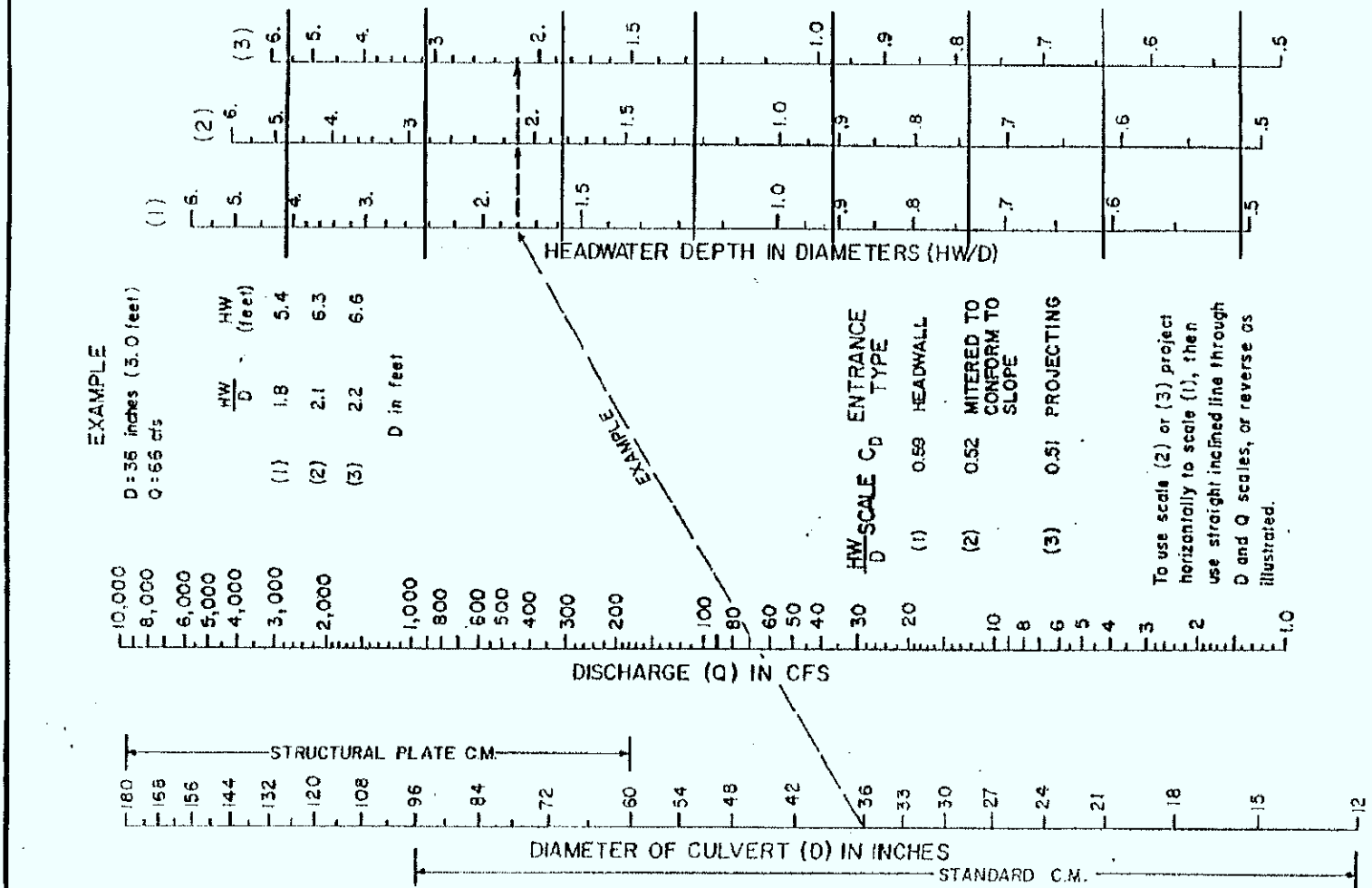


HEADWATER DEPTH FOR
OVAL CONCRETE PIPE CULVERTS
LONG-AXIS VERTICAL
WITH INLET CONTROL

BUREAU OF PUBLIC ROADS--JAN. 1963

APPROVED: DATE May 9, 1980

STD. NO.	REV
15 26	



EXAMPLE
 D = 36 inches (3.0 feet)
 Q = 300 cfs

HW/D	HW (feet)	D in feet
(1) 1.8	5.4	
(2) 2.1	6.3	
(3) 2.2	6.6	

HW SCALE C_d ENTRANCE TYPE
 (1) 0.59 HEADWALL
 (2) 0.52 MITERED TO CONFORM TO SLOPE
 (3) 0.51 PROJECTING

To use scale (2) or (3) project horizontally to scale (1), then use straight inclined line through D and Q scales, or reverse as illustrated.

REVISIONS		
NO.	DATE	DESCRIPTION

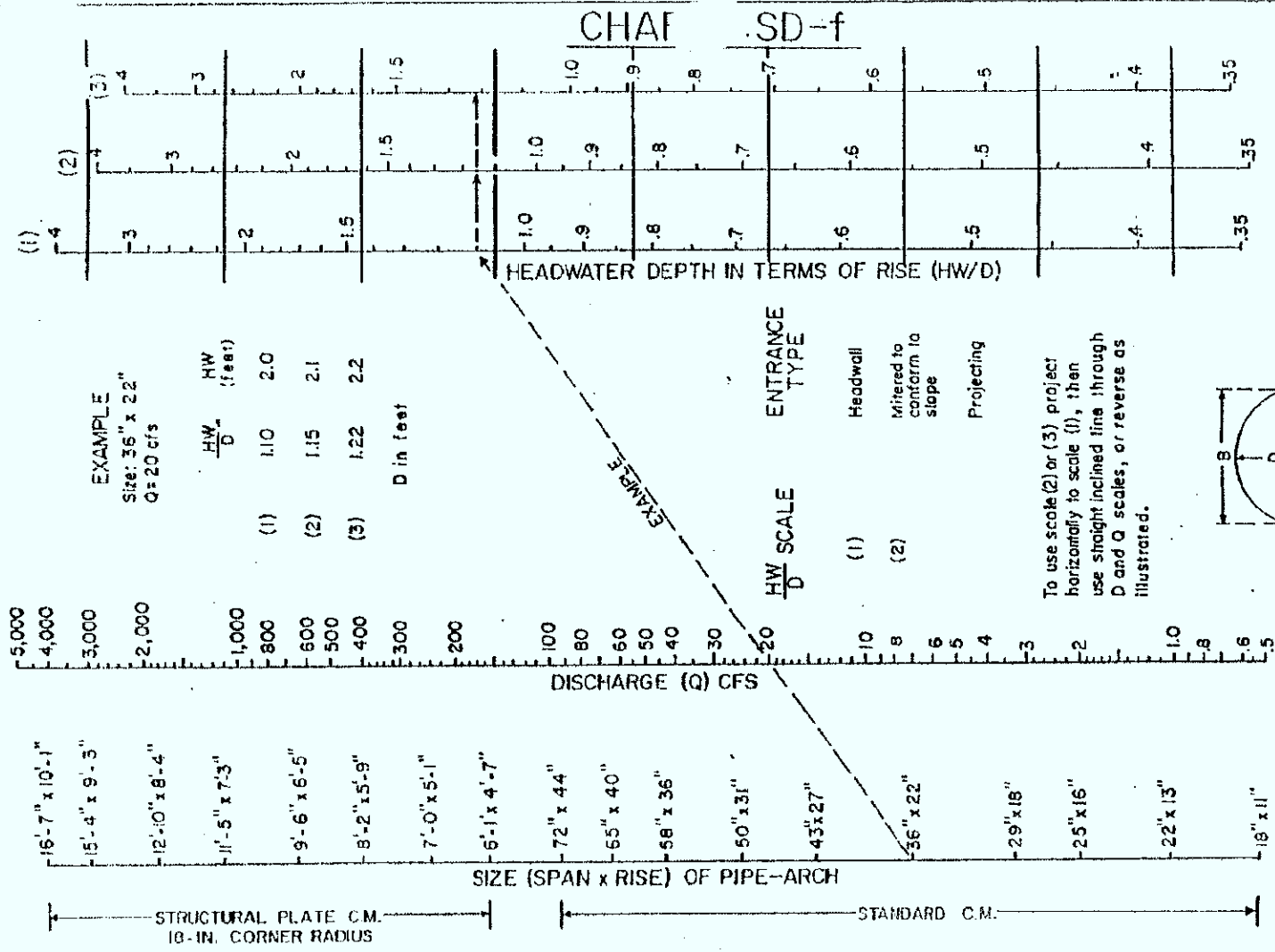
HEADWATER DEPTH FOR
 C.M. PIPE CULVERTS
 WITH INLET CONTROL

APPROVED: DATE May 8, 1960

REVISIONS		
NO.	DATE	DESCRIPTION

HEADWATER DEPTH FOR
C.M. PIPE-ARCH CULVERTS
WITH INLET CONTROL

APPROVED: DATE May 8, 1980

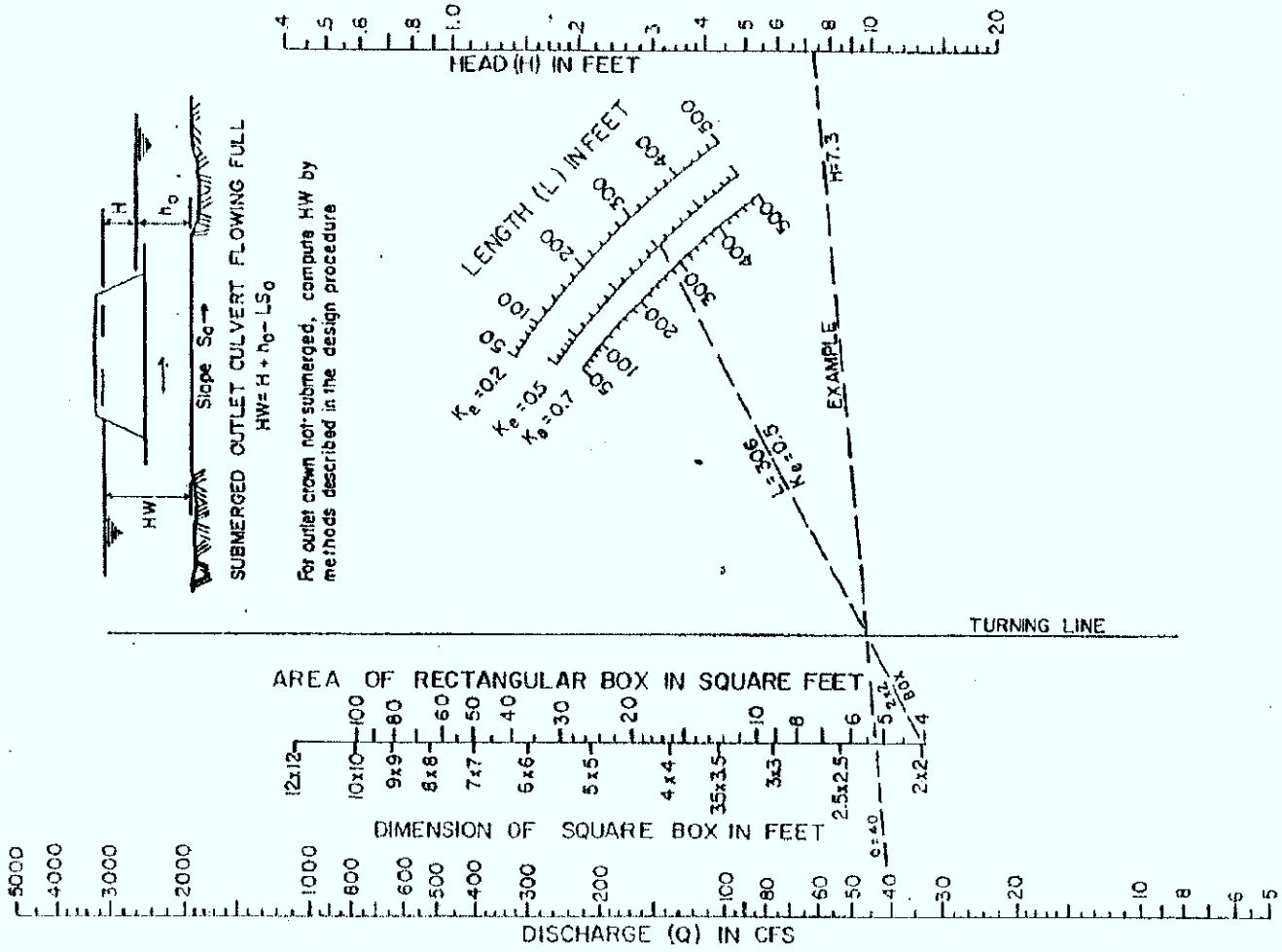
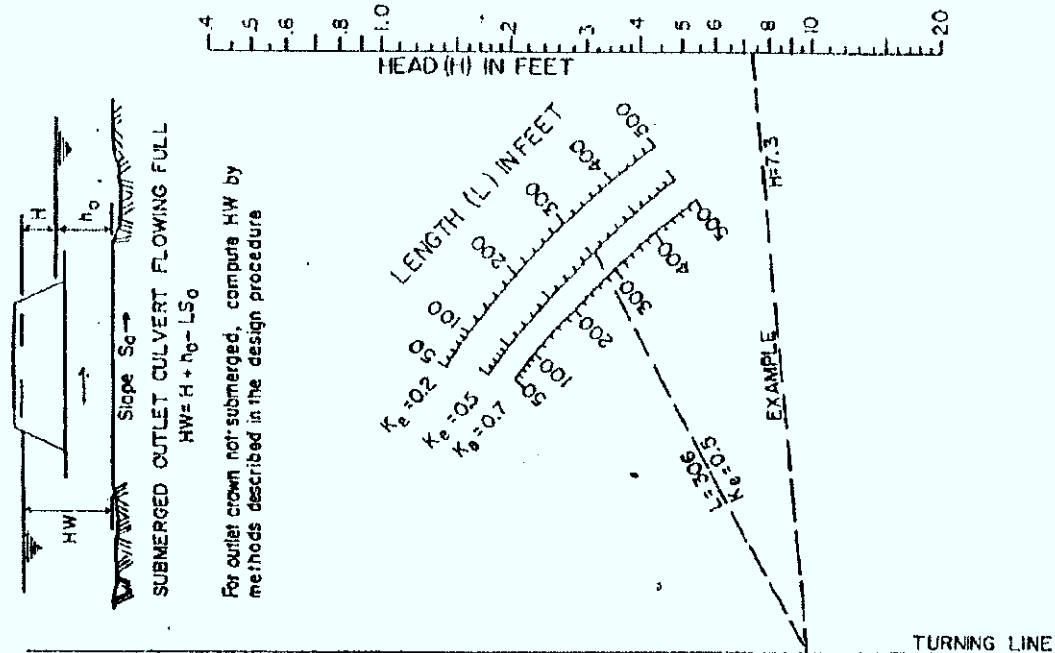


ADDITIONAL SIZES NOT DIMENSIONED ARE LISTED IN FABRICATOR'S CATALOG

BUREAU OF PUBLIC ROADS — JAN. 1963

STD. NO.	REV.
15.00	

CHAR. SD-g

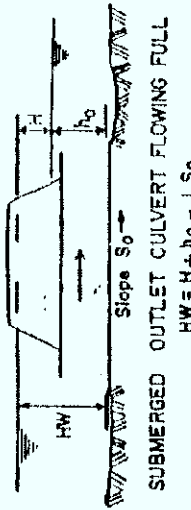
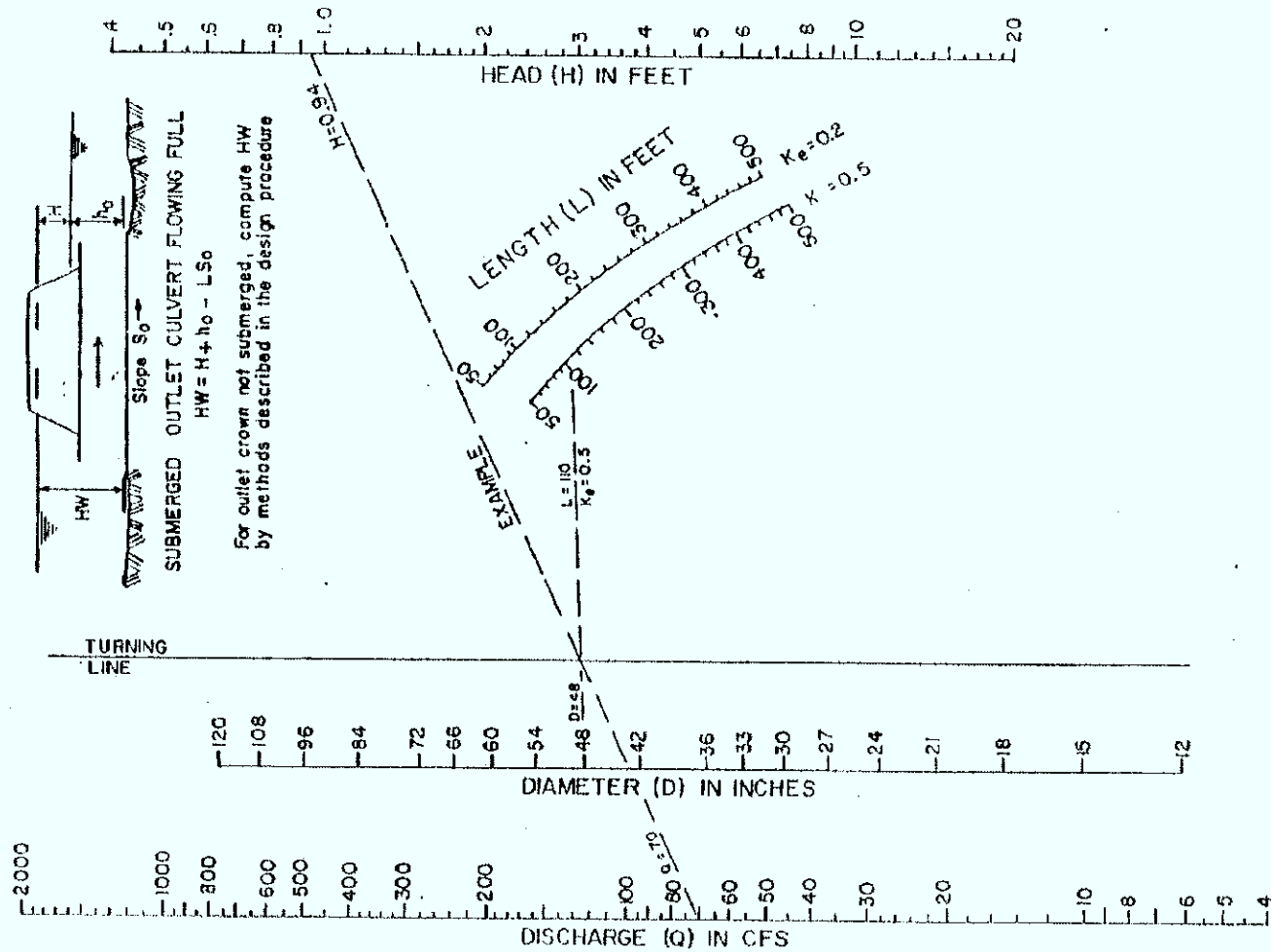


REVISIONS		
NO.	DATE	DESCRIPTION

HEAD FOR
 CONCRETE BOX CULVERTS
 FLOWING FULL
 $n = 0.012$ **0.013**

APPROVED: DATE May 8, 1960

CHA... SD-h



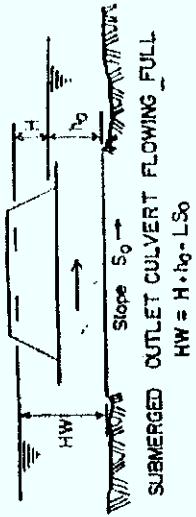
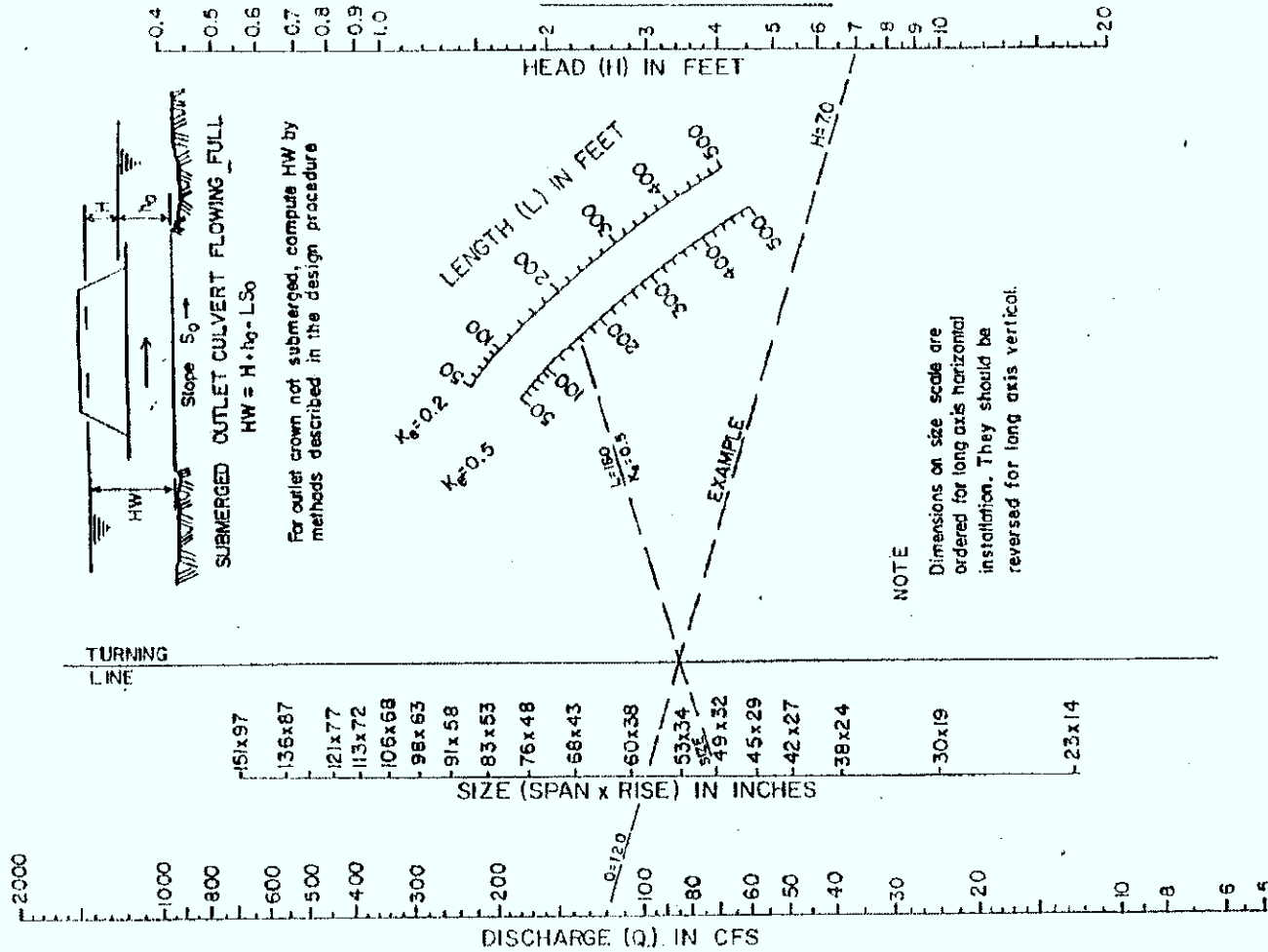
For outlet crown not submerged, compute HW by methods described in the design procedure

REVISIONS		
NO.	DATE	DESCRIPTION

HEAD FOR
CONCRETE PIPE CULVERTS
FLOWING FULL
 $n = 0.012$ **0.013**

APPROVED: DATE May 8, 1960

CHART SD-i



SUBMERGED OUTLET CULVERT FLOWING FULL
 $HW = H + h_0 - LS_0$
 For outlet crown not submerged, compute HW by methods described in the design procedure

NOTE
 Dimensions on size scale are ordered for long axis horizontal installation. They should be reversed for long axis vertical.

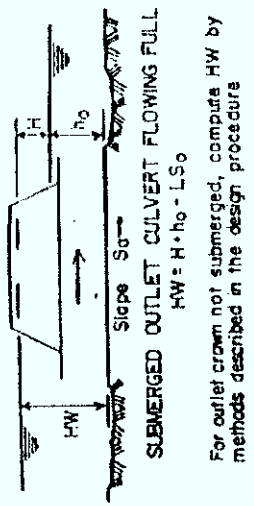
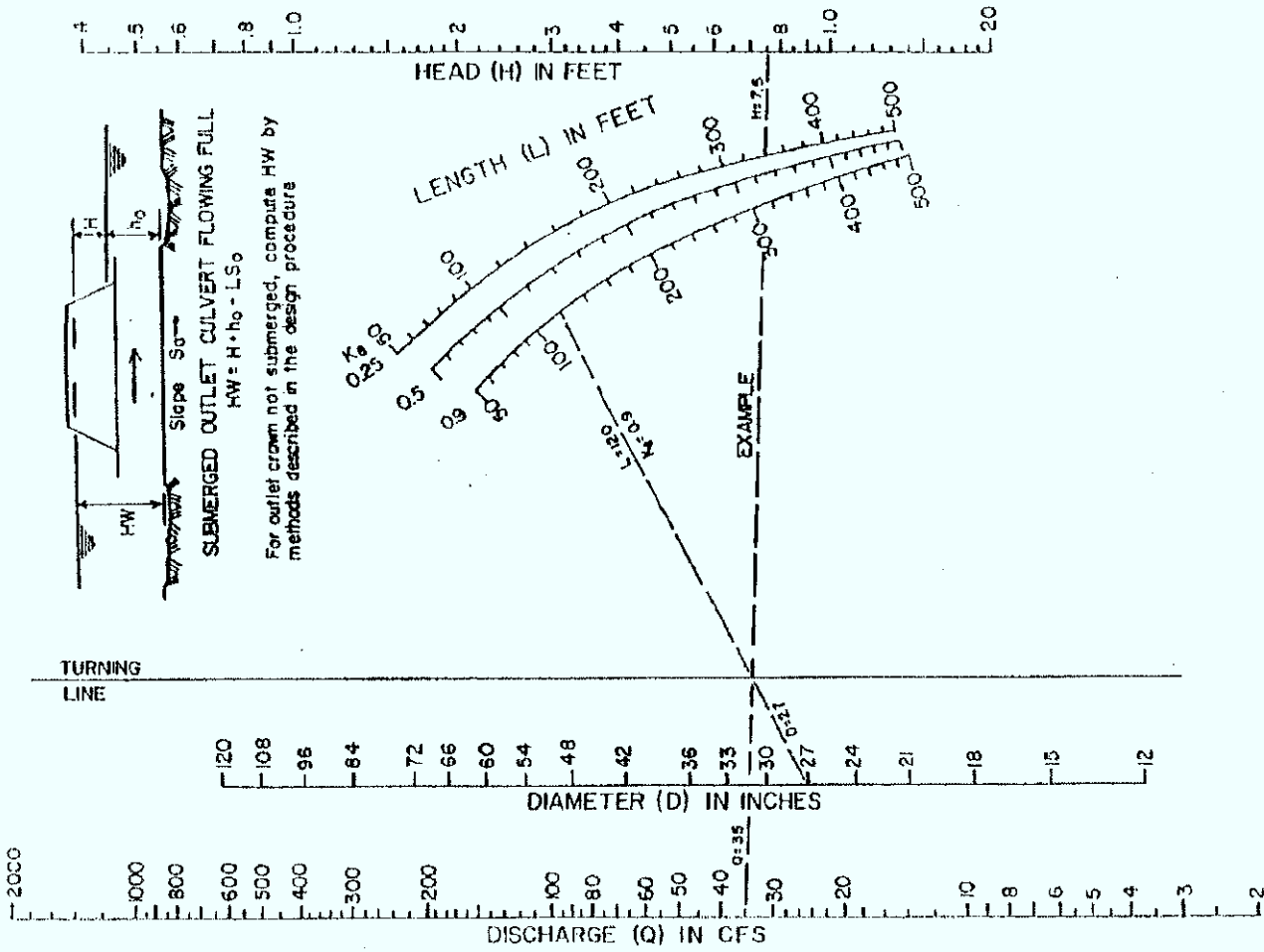
HEAD FOR
 OVAL CONCRETE PIPE CULVERTS
 LONG AXIS HORIZONTAL OR VERTICAL
 FLOWING FULL
 $n = \cancel{0.012} \ 0.013$

REVISIONS		
NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 1980

STD. NO.	REV.
15-31	

CHAR, SD-j



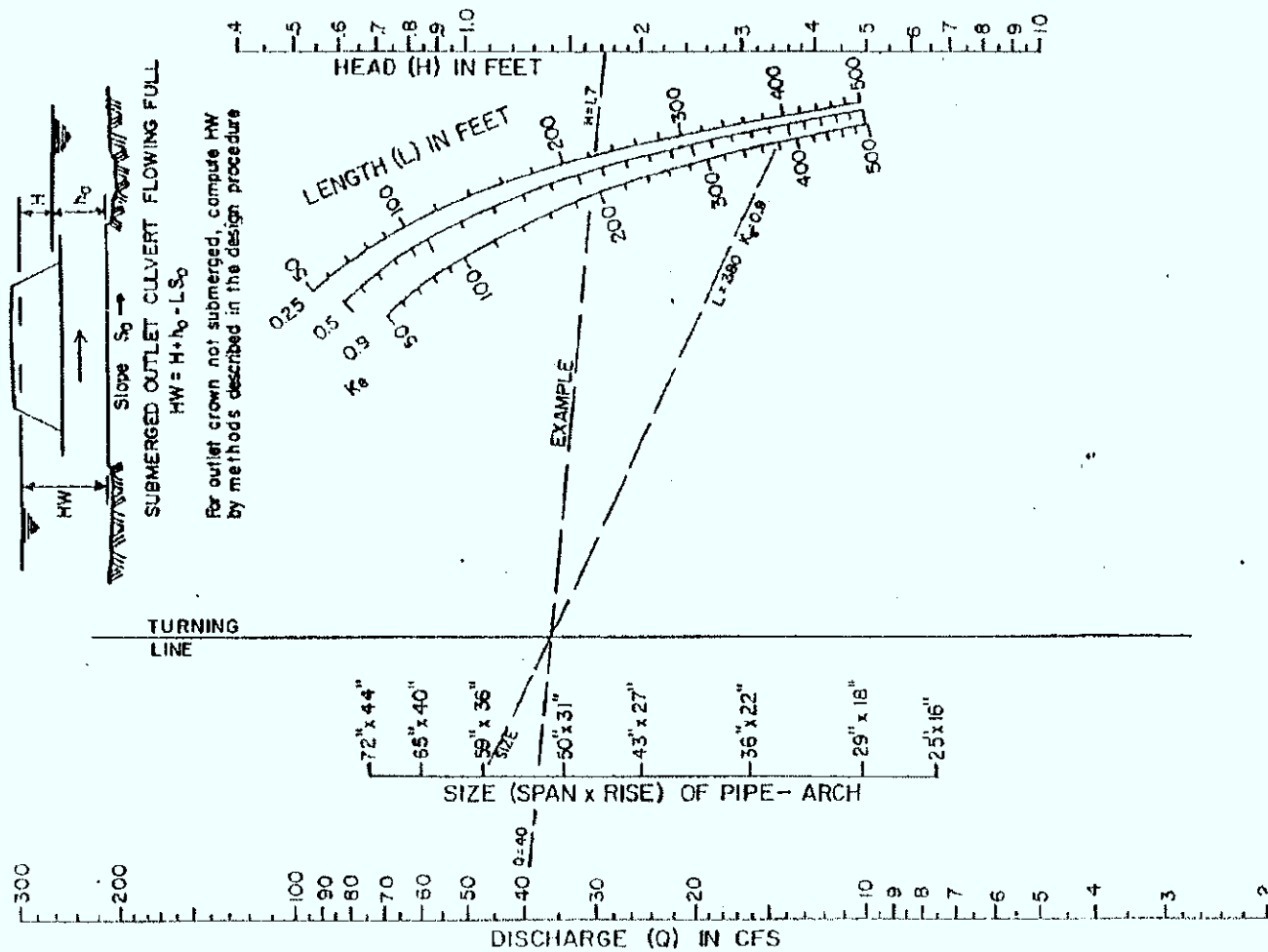
REVISIONS		
NO.	DATE	DESCRIPTION

HEAD FOR
STANDARD
C. M. PIPE CULVERTS
FLOWING FULL
 $n = \cancel{0.023} \ 0.024$

APPROVED: DATE May 8, 1980

BUREAU OF PUBLIC ROADS - JAN. 1963

CHAR. SD-k



REVISIONS

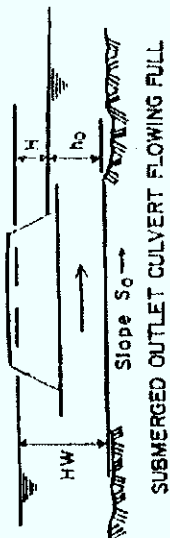
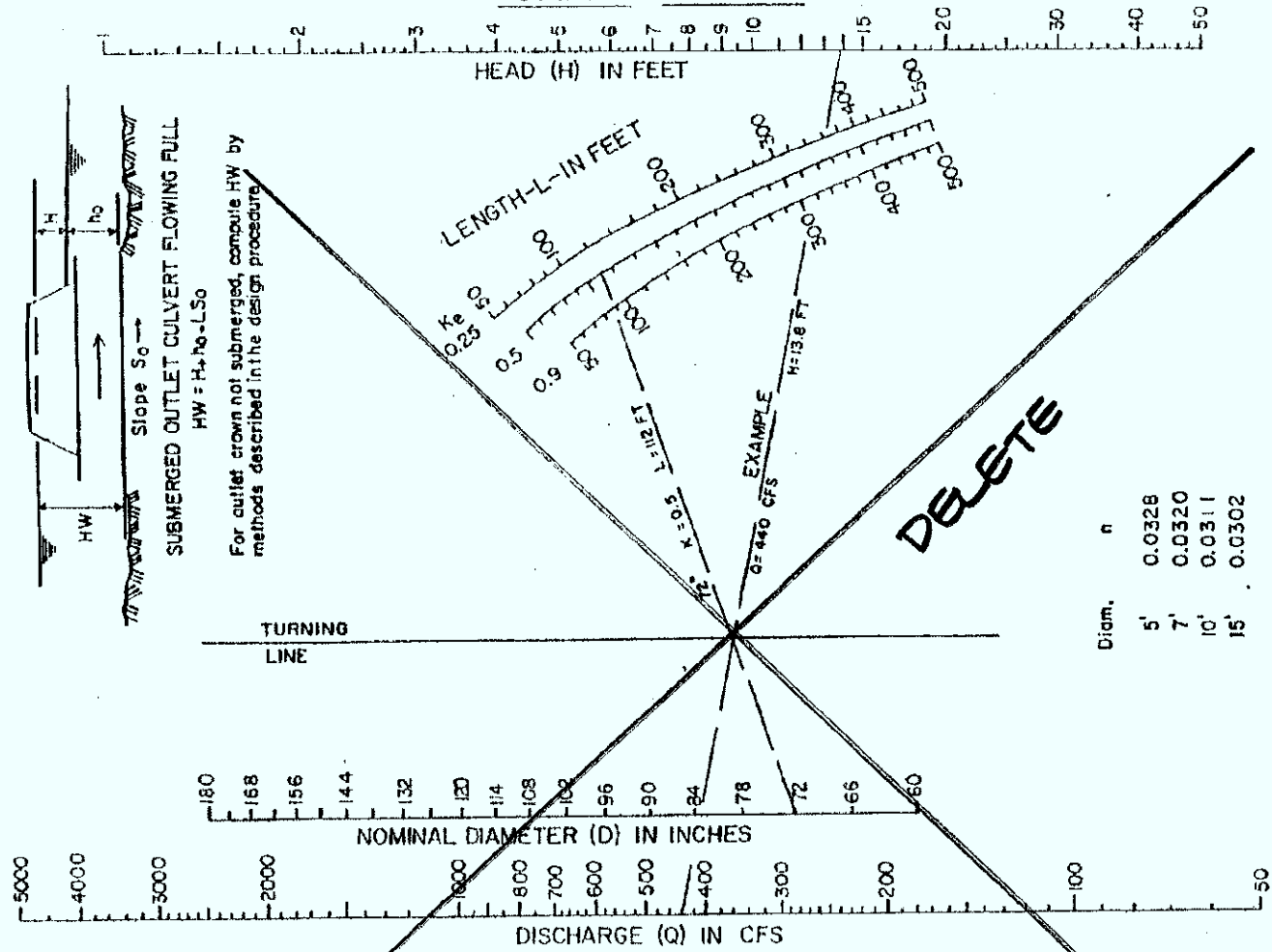
NO.	DATE	DESCRIPTION

HEAD FOR
STANDARD C. M. PIPE-ARCH CULVERTS
FLOWING FULL
 $n = 0.023$ **0.024**

APPROVED: DATE May 8, 1960

BUREAU OF PUBLIC ROADS - JAN. 1963

CHAF. SD-1



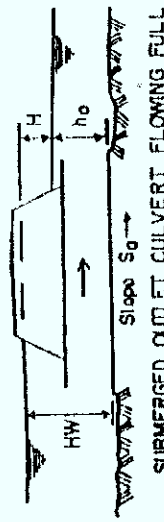
For outlet crown not submerged, compute HW by methods described in the design procedure.

Diam.	n
5'	0.0328
7'	0.0320
10'	0.0311
15'	0.0302

REVISIONS		
NO.	DATE	DESCRIPTION

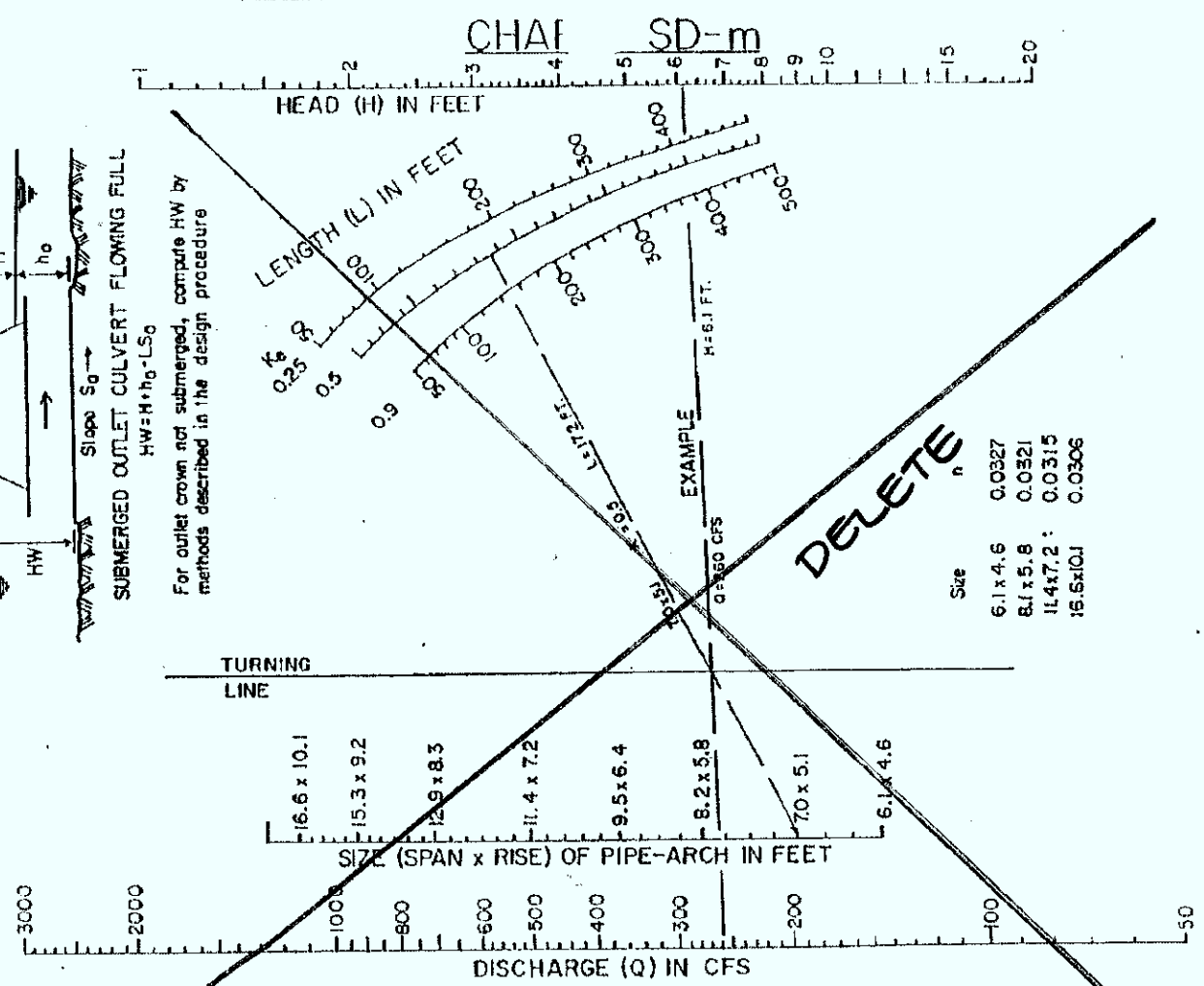
HEAD FOR
 STRUCTURAL PLATE
 CORR. METAL PIPE CULVERTS
 FLOWING FULL
~~n = 0.0328 TO 0.0302~~

APPROVED: DATE May 8, 1980



SUBMERGED OUTLET CULVERT FLOWING FULL

For outlet crown not submerged, compute HW by methods described in the design procedure



REVISIONS

NO.	DATE	DESCRIPTION

HEAD FOR
STRUCTURAL PLATE
CORRUGATED METAL
PIPE ARCH CULVERTS
18 IN. CORNER RADIUS
FLOWING FULL

~~n = 0.0327 TO 0.0306~~

Size

6.1 x 4.6	0.0327
8.1 x 5.8	0.0321
11.4 x 7.2	0.0315
15.5 x 10.1	0.0306

APPROVED: DATE May 8, 1980

BUREAU OF PUBLIC ROADS - JAN. 1963

STD. NO.	REV.
15 35	

STORM WATER DETENTION

MANAGEMENT

STORMWATER MANAGEMENT

DESIGN AND CONSTRUCTION CRITERIA

The following criteria will be used for the design and construction of all stormwater facilities within extraterritorial boundaries of the City of Greenville.

GENERAL:

- Design and installation of all stormwater impoundment facilities must comply with applicable Federal, State, and local laws. Attention should be given to the City of Greenville Soil Erosion and Sediment Ordinance and the North Carolina Dam Safety Law.
- In no case shall a habitable structure be located within the impoundment area of any stormwater storage facility.
- No utilities (sewer lines, power lines, water lines, etc.) shall be located within or immediately around any impoundment facility.
- All impoundment facilities will be considered permanent.
- All facilities shall be protected by a "Drainage Easement" or as a common lot recorded at Pitt County Register of Deeds office.

STORMWATER PLAN:

A stormwater plan acceptable by the City Engineer's standards will include the following:

- I. Stormwater Management Plan
 - a. General
 - i. Vicinity Map
 - ii. Legend, North arrow and Scale
 - iii. Title Block with development name, owner, engineering firm, engineer's seal, and signature
 - iv. Existing and proposed contours at not more than 2' intervals
 - v. Flood boundaries identified
 - vi. Existing and proposed improvements (built upon area)
 - vii. Existing and proposed ground cover

b. Drainage

- i. Existing and proposed drainage patterns and structures (BMP's, pipe systems, ditches/streams, ponds, etc.)
- ii. Size, length, and grade of pipes and swales
- iii. Drainage area map
- iv. Soil types

c. Calculations

- i. First Flush
- ii. Attenuation of 1-year, 24-hour storm
- iii. Underdrain calculations (if necessary)
- iv. Sizing of treatment area
- v. Pipe/swale sizing calculations

d. Maintenance

- i. BMP maintenance agreement
- ii. Check to record agreement (Pitt County Register of Deeds)
- iii. Maintenance Plan
- iv. Adequate access to perform required maintenance
- v. Easement (if required)

e. Erosion Control

- i. Construction sequence
- ii. Location of BMP erosion control measures (if necessary)

II. Stormwater Management Narrative

- a. Description of project
- b. Calculations of runoff

- c. Calculations for design of stormwater impoundment facility
- d. Staging of project
- e. Soil conditions
- f. Soil type
- g. Susceptibility to erosion and preventive measures
- h. Seeding formula

NUTRIENT REDUCTIONS:

- All facilities constructed to achieve nutrient reductions shall meet all requirements specified in the North Carolina Division of Water Quality Stormwater Best Management Practices Manual.

ATTENUATION:

- Various methods of which impoundment storage volume is approximated may be utilized; however, the result must at least equal that volume approximated using the method described within this manual.
- All required storage volume approximations must be included with the submitted design.

PRIMARY OUTLET DEVICE

- All outlet devices must be constructed adhering to current construction standards as described in the City of Greenville's "Manual of Standard Designs and Details."
- Alternate outlet devices not referred to in this publication may be approved at the discretion of the City Engineer. Such approval must be specifically requested upon submittal of the drainage plan.
- The water velocity generated by any outlet device must meet the requirements set forth by the City of Greenville Soil Erosion and Sediment Control Ordinance.

SECONDARY OUTLET DEVICE (EMERGENCY SPILLWAY):

- It is recommended that all vegetated spillways be constructed in nonfilled or cut areas. However,

- Emergency spillways may be constructed in fill areas provided they are asphalt or concrete lined and have sufficient approach and exit areas.
- Any emergency spillways as a minimum must pass the peak 25-year flood, as approved by the City Engineer, after the storage facility has reached its capacity.

FACILITY LIFE:

- All stormwater impoundments are to be permanent facilities.
- All materials used in the construction of a stormwater impoundment facility must have a life expectancy to that of the total facility or a regularly scheduled replacement program must be provided.

Determination of Impoundment Storage Volume

On-site detention involves the storage of stormwater runoff and the controlled release of that runoff and is applicable for all proposed sites required to meet the City of Greenville's Stormwater Management Program. See this program and any amendments for requirements. The excess runoff from the developed site is less than or equal to the rate of stormwater runoff prior to the installation of the impervious cover for storms up to and including the 1-year (80% of 2-year) storm. All impoundments will have an emergency device or "spillway" that will safely pass the 25-year storm, as approved by the City Engineer. The weir will be sized to carry the 25-year storm safely with an additional one foot of freeboard.

Flood routing is an algebraic method for determining the time and magnitude of a particular flood situation with regard to the rate of inflow storage versus the rate of outflow discharge. For the purpose of this manual, the routing procedure is based on the procedure described in the "Design Approaches of Stormwater Management in Urban Areas" by Dr. H. Rooney Malcolm, Jr. of N.C. State University.

Maximum Permissible Release Rate

The maximum release rate must be limited to that rate of runoff discharged from the site immediately prior to the proposed development during the 1-year (80% of 2-year) storm. This rate can be calculated according to the Rational Method described in this manual.

A group of hydrographs can be developed where the intensity is varied by using storms with different durations. The volume of runoff associated with each hydrograph is calculated by multiplying the maximum runoff rate with the respective storm duration (Note that runoff is measured in cubic feet per second and the duration is in minutes.).

Once the hydrographs have been developed it is necessary to convert the maximum runoff rates for each rainfall to storm runoff volumes. These volumes should be computed in cubic feet.

This is only an approximation which is applicable to small basins. Many different methods may be used in the design of impoundment facilities and innovative designs will be considered by the City Engineer provided the maximum permissible release rate and storage facility requirements are met with a safety factor. In all cases, the design will be routed for confirmation.

STREET STANDARDS

Item # 13

SUMMARY OF STREET STANDARDS

<u>STREET CLASSIFICATIONS</u>	<u>CROSS SECTION</u>	<u>EASEMENT/ROW</u>	<u>PAVEMENT WIDTH (B/B)</u>	<u>AVERAGE DAILY TRAFFIC</u>
Private Street	Curb	40' Easement	24'	<400
	Ditch	60' Easement	20'	<400
Standard Residential	Curb	50'	28'	<1500
	Ditch	60'	22'	<1500
Collector	Curb	60'	36'	1500-3500
	Ditch	70'	34'	1500-3500
Planned Industrial	Ditch	80'	28'	N/A
Minor Thoroughfare	Curb	80'	65'	5000-10000
Major Thoroughfare	Curb	100'+	variable	10000+
Min Longitudinal Slope	<u>Std. C&G</u>		<u>Roll C&G</u>	<u>Non C&G (Outside urban core, single family only)</u>
	0.3%		0.5%	0.5% (channel flow line) 0.5% (street center line)
Max. Depth of Flow				
	Thoroughfare	0.3 ft	N/A	N/A
	Non-thoroughfare	0.5 ft	0.3 ft	2 ft
Min. Driveway Culvert Size	N/A		N/A	15"

NOTES:

The minimum longitudinal grade for channel sections may be reduced for cross drainage and at some isolated locations with the approval of the City Engineer. The City Engineer shall have the option of requiring piping for channels less than 0.8% slope.

Minimum driveway separation long non-curb and gutter streets shall be 100 feet center to center as measured along the edge of pavement. A shared culvert configuration may be utilized pursuant to Standards 50.09, 50.10 and 50.11. if the required spacing cannot be obtained.

Driveways, along standard curb and gutter streets, shall conform to the Driveway Ordinance which requires removal of the complete section of the curb and gutter in lieu of breaking off the back of curb.

Driveway culvert sizes for each single family lot shall be determined at time of construction plan approval and shall be recorded on the final plat for each lot.

The maximum 10-year storm headwater depth for driveway culverts shall not exceed 1.2D or the elevation of the driveway, whichever is less.

linings and velocity control devices shall be designed and installed in accordance with the Soil Erosion and Sedimentation Control Ordinance and the North Carolina Erosion and Sediment Control Planning and Design Manual.

Any street to be city-maintained shall have "Record Drawings" submitted and approved prior to scheduling of the pre-final street acceptance inspection. All "Record Drawings" for streets and storm drainage infrastructure shall include, but not necessarily limited to, the information as identified in the *Street and Storm Drainage "Record Drawings" Submittal Requirements*.

Approved date: July 1, 1997

No.	Date	Description
1	7/1/97	REVISED
2	11/17/09	RECORD DWGS

All required channel

STD NO.	Revision
35.01	1

PAVING SCHEDULE INDEX

- Ⓐ BITUMINOUS CONCRETE SURFACE COURSE, TYPE S-9.5B
- Ⓑ BITUMINOUS CONCRETE SURFACE COURSE, TYPE S-9.5B
- Ⓒ BITUMINOUS CONCRETE BASE COURSE, TYPE B-25.0B
- Ⓓ BITUMINOUS CONCRETE SURFACE COURSE, TYPE S-9.5B
- Ⓔ BITUMINOUS CONCRETE BASE COURSE, TYPE B-25.0B
- Ⓕ BITUMINOUS CONCRETE BASE COURSE, TYPE B-25.0B
- Ⓖ BITUMINOUS CONCRETE BINDER, TYPE I-19.0B

- Ⓘ COARSE AGGREGATE BASE COURSE
- Ⓙ COARSE AGGREGATE BASE COURSE
- Ⓚ COARSE AGGREGATE BASE COURSE
- Ⓛ CONCRETE CURB AND GUTTER
- Ⓜ CONCRETE CURB AND GUTTER

REVISIONS

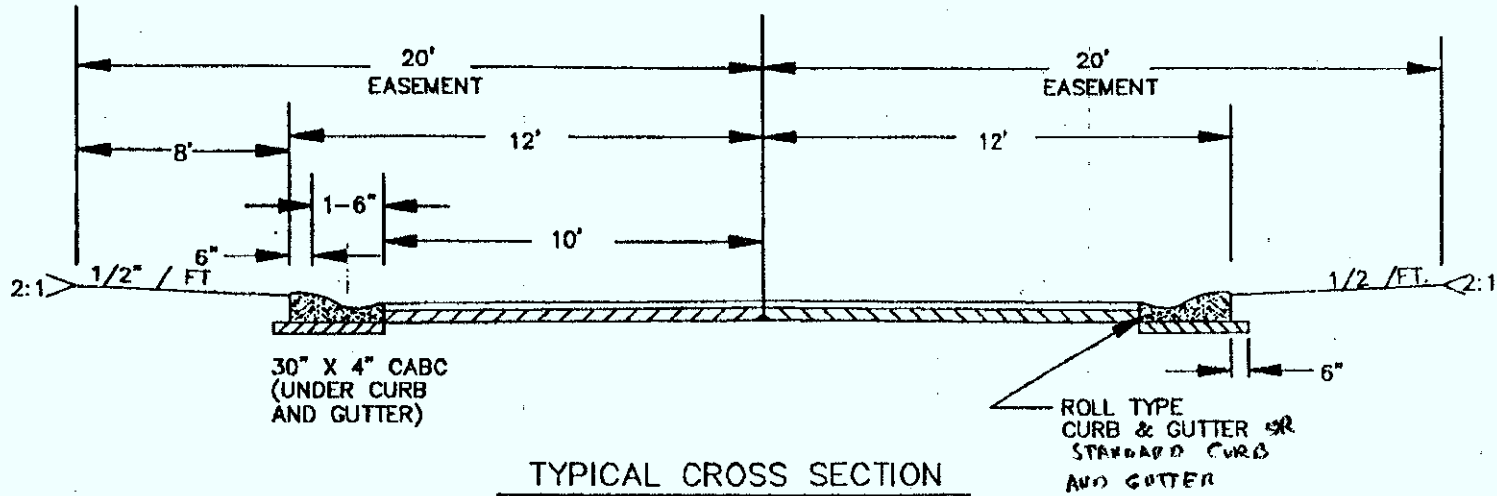
NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 1980

PAVING INDEX SCHEDULE

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

STD. NO.	REV.
35.02	13



NOTE:

1. PAVEMENT DESIGN TO BE ACCORDING TO PROCEDURE DESCRIBED IN STD. NO. 40.01

2. MAY ONLY BE USED IN CASES WHERE PROJECTED TRAFFIC VOLUMES WILL NOT EXCEED 400 ADT BASED ON TRIP GENERATION FACTORS SHOWN ON STD. NO. 40.15.

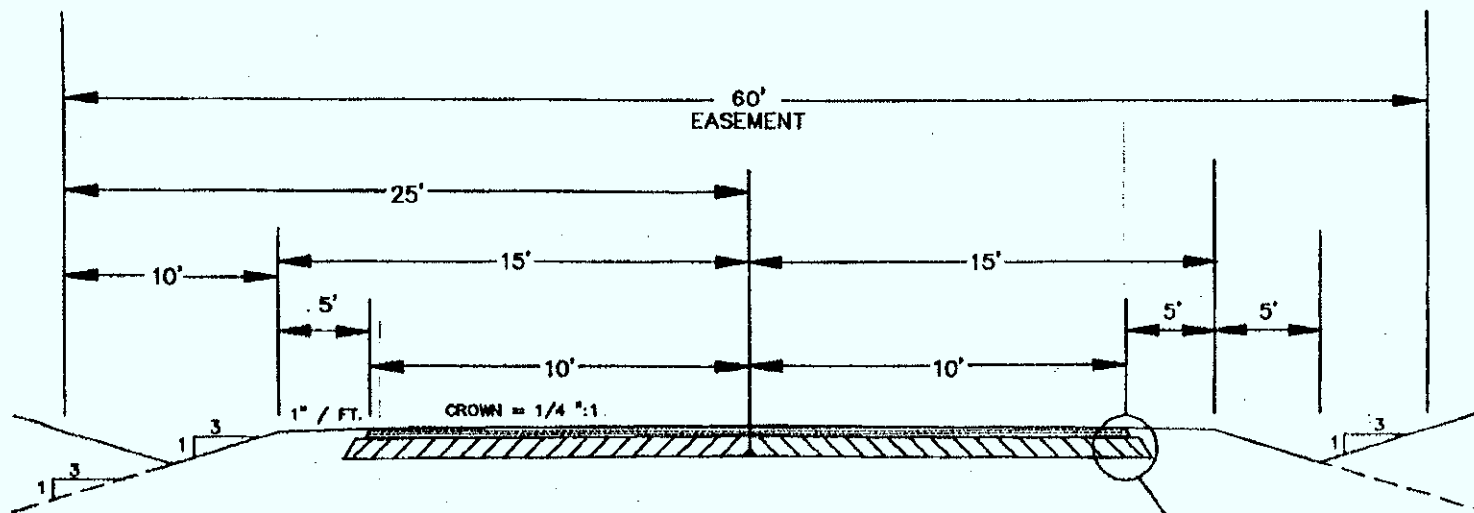
NO.	DATE	DESCRIPTION
1	7/1/97	REVISED

APPROVED: DATE 7/1/97

PRIVATE STREET
(CURB & GUTTER)

CITY OF GREENVILLE, N. C. ENGINEERING DIVISION

STD. NO.	REV.
35.03-A	



NOTE:

1. PAVEMENT DESIGN TO BE ACCORDING TO PROCEDURE DESCRIBED IN STD. NO. 40.01

2. MAY ONLY BE USED IN CASES WHERE PROJECTED TRAFFIC VOLUMES WILL NOT EXCEED 400 ADT BASED ON TRIP GENERATION FACTORS SHOWN ON STD. NO. 40.15.

TYPICAL CROSS SECTION

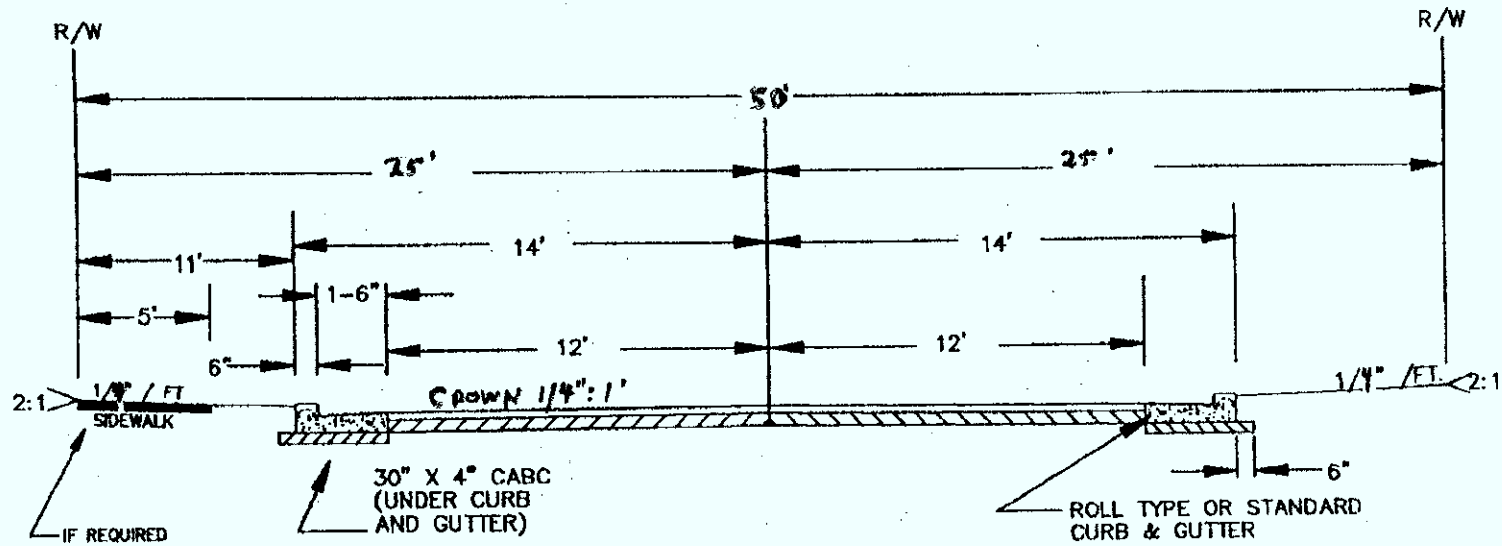
NO.	DATE	DESCRIPTION
1	7/1/97	REVISED

APPROVED DATE 7/1/97

PRIVATE STREET
(NON-CURB & GUTTER)

CITY OF GREENVILLE, N. C. ENGINEERING DIVISION

STD. NO.	REV.
35.03-B	



TYPICAL CROSS SECTION

NOTE:

1. PAVEMENT DESIGN TO BE ACCORDING TO PROCEDURE DESCRIBED IN STD. NO. 40.01
2. MAY ONLY BE USED IN CASES WHERE PROJECTED TRAFFIC VOLUMES WILL NOT EXCEED 1500 ADT BASED ON TRIP GENERATION FACTORS SHOWN ON STD. NO. 40.15.

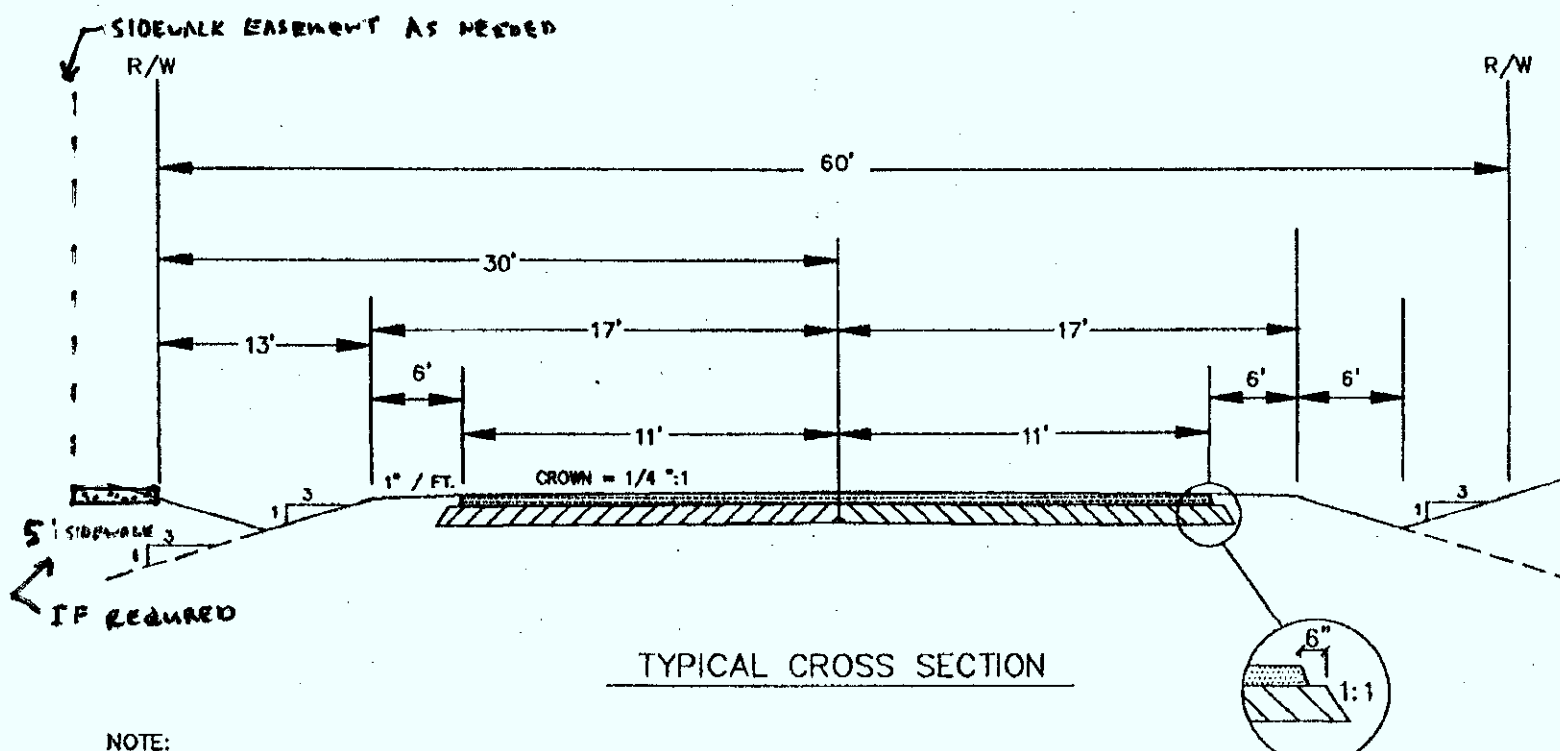
NO.	DATE	DESCRIPTION
1	7/1/97	REVISED

APPROVED DATE 7/1/97

STANDARD RESIDENTIAL STREET
(CURB & GUTTER)

CITY OF GREENVILLE, N. C. ENGINEERING DIVISION

STD. NO.	REV.
35.05-A	



TYPICAL CROSS SECTION

NOTE:

1. PAVEMENT DESIGN TO BE ACCORDING TO PROCEDURE DESCRIBED IN STD. NO. 40.01
2. MAY ONLY BE USED IN CASES WHERE PROJECTED TRAFFIC VOLUMES WILL NOT EXCEED 1500 ADT BASED ON TRIP GENERATION FACTORS SHOWN ON STD. NO. 40.15.
3. TIE IN SLOPES MAY BE SHALLOWER, HOWEVER ALL DRAINAGE MUST BE MAINTAINED WITHIN R/W.

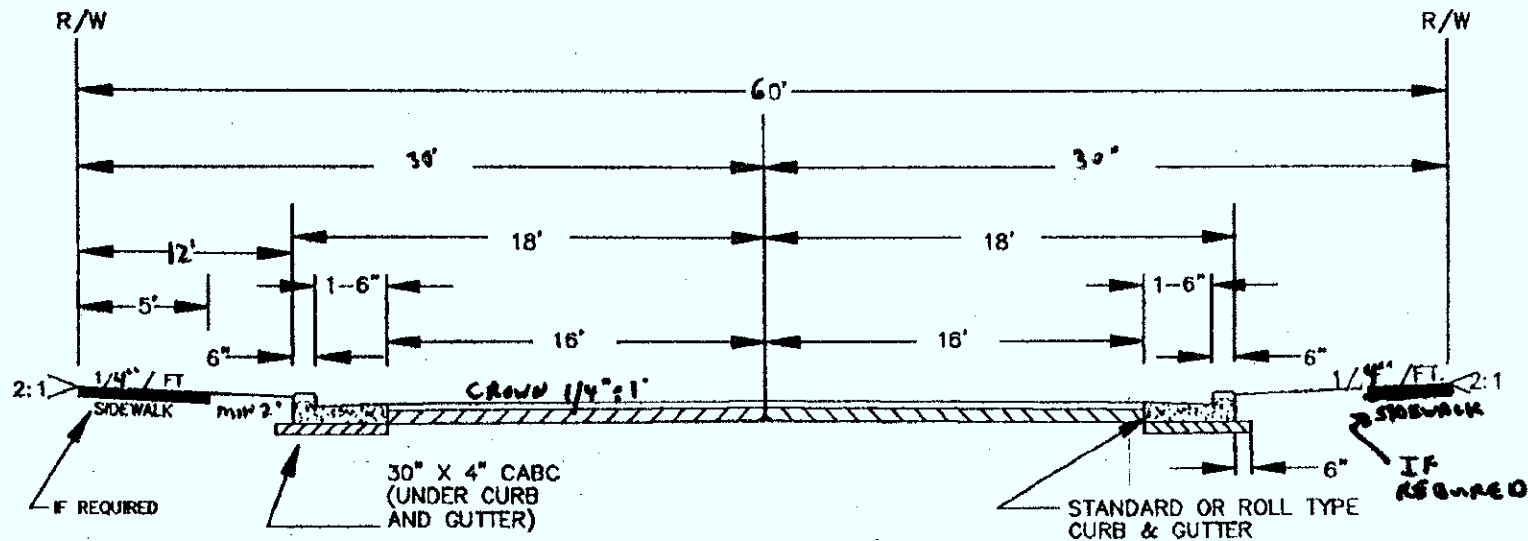
NO.	DATE	DESCRIPTION
	7/1/07	NEW STANDARD

APPROVED DATE 7/1/07

STANDARD RESIDENTIAL STREET
(NON-CURB & GUTTER)

CITY OF GREENVILLE, N. C. ENGINEERING DIVISION

STD. NO.	REV.
35.05-B	



TYPICAL CROSS SECTION

NOTE:

1. PAVEMENT DESIGN TO BE ACCORDING TO PROCEDURE DESCRIBED IN STD. NO. 40.01
2. MAY ONLY BE USED IN CASES WHERE PROJECTED TRAFFIC VOLUMES WILL NOT EXCEED 1500-3500 ADT BASED ON TRIP GENERATION FACTORS SHOWN ON STD. NO. 40.15.

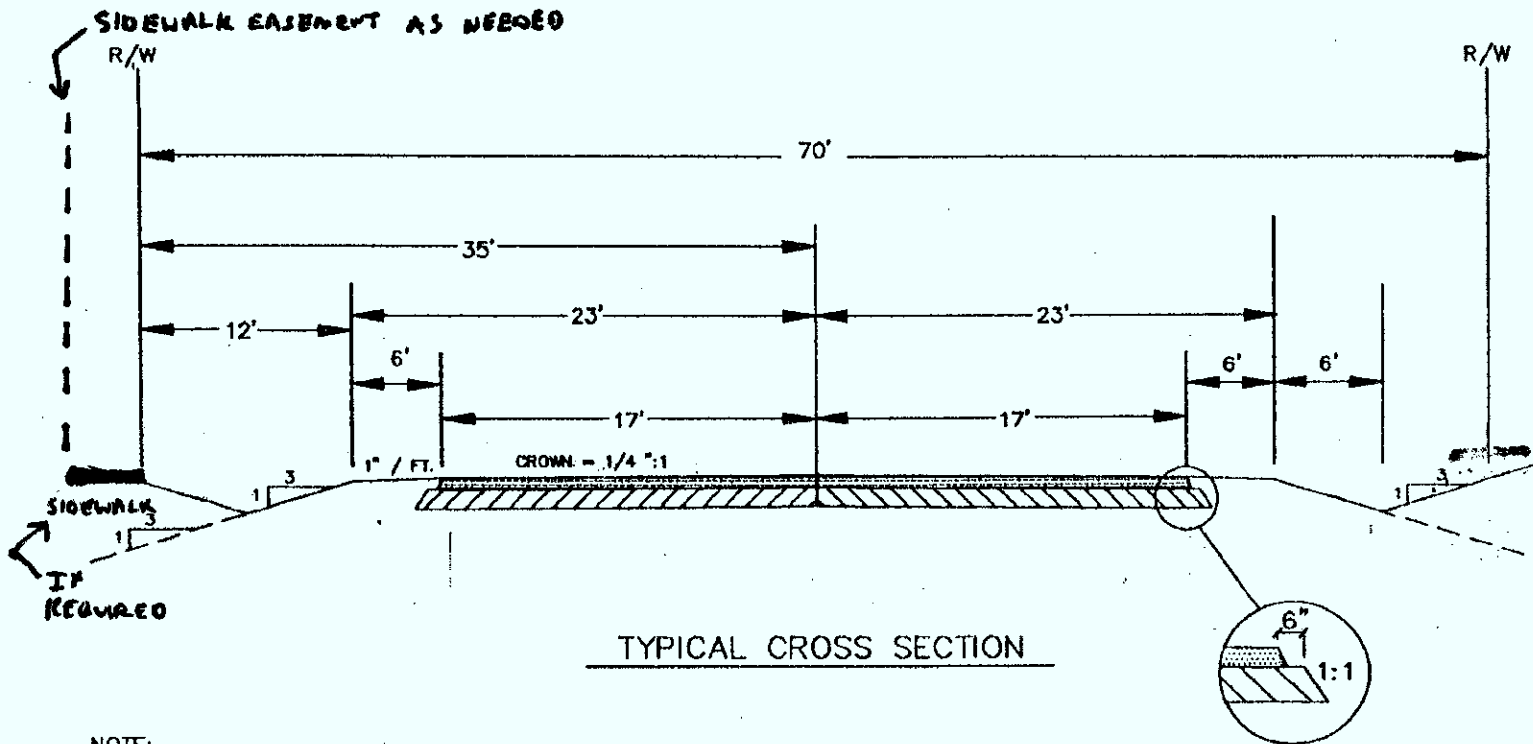
NO.	DATE	DESCRIPTION
1	7/1/97	REVISED

APPROVED: DATE 7/1/97

COLLECTOR STREET
(CURB & GUTTER)

CITY OF GREENVILLE, N. C. ENGINEERING DIVISION

STD. NO.	REV.
35.06-A	



TYPICAL CROSS SECTION

NOTE:

1. PAVEMENT DESIGN TO BE ACCORDING TO PROCEDURE DESCRIBED IN STD. NO. 40.01
2. MAY ONLY BE USED IN CASES WHERE PROJECTED TRAFFIC VOLUMES WILL NOT EXCEED 1500-3500 ADT BASED ON TRIP GENERATION FACTORS SHOWN ON STD. NO. 40.15.

3. TIE IN SLOPES MAY BE SHALLOWER, HOWEVER ALL DRAINAGE MUST BE MAINTAINED WITHIN R/W.

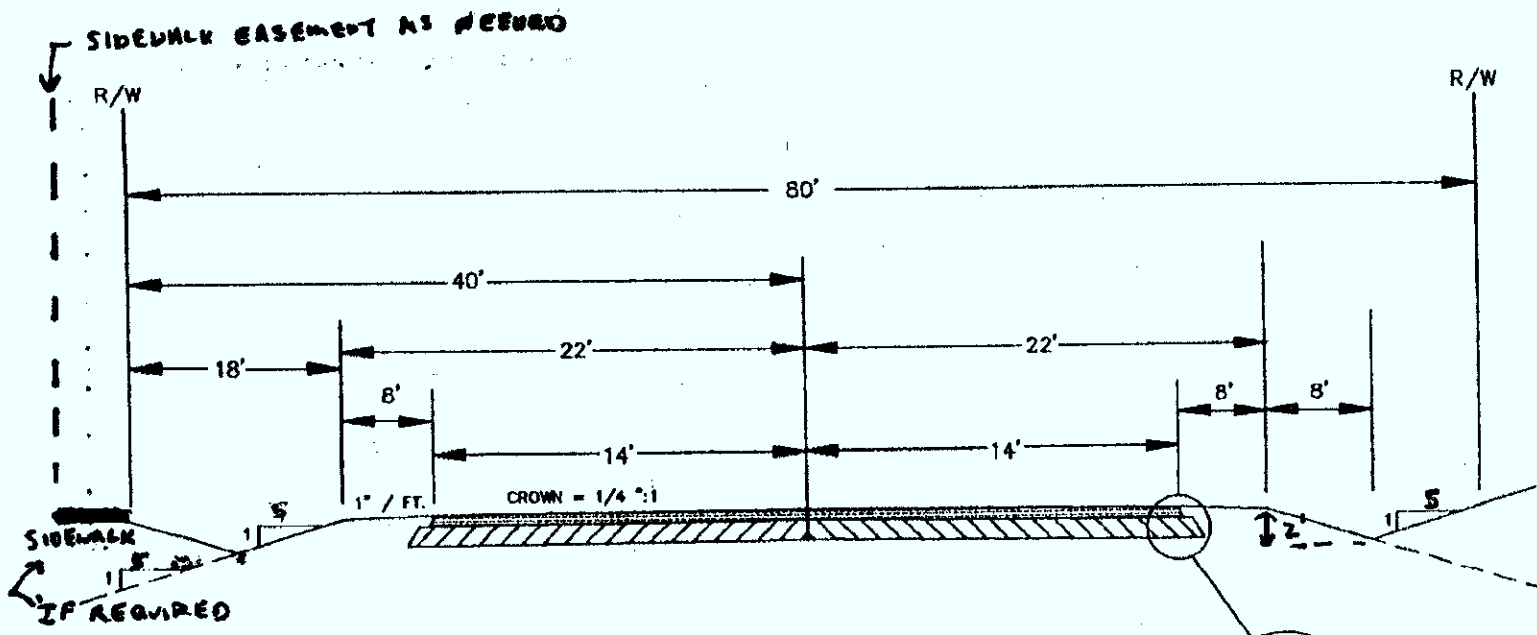
NO.	DATE	DESCRIPTION
	7/1/97	NEW STANDARD

APPROVED: DATE 7/1/97

COLLECTOR STREET
(NON-CURB&GUTTER)

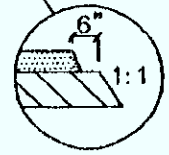
CITY OF GREENVILLE, N. C. ENGINEERING DIVISION

STD. NO.	REV.
35.06-B	



NOTE: PAVEMENT DESIGN TO BE ACCORDING TO PROCEDURE DESCRIBED IN STD. NO. 40.01

TYPICAL CROSS SECTION



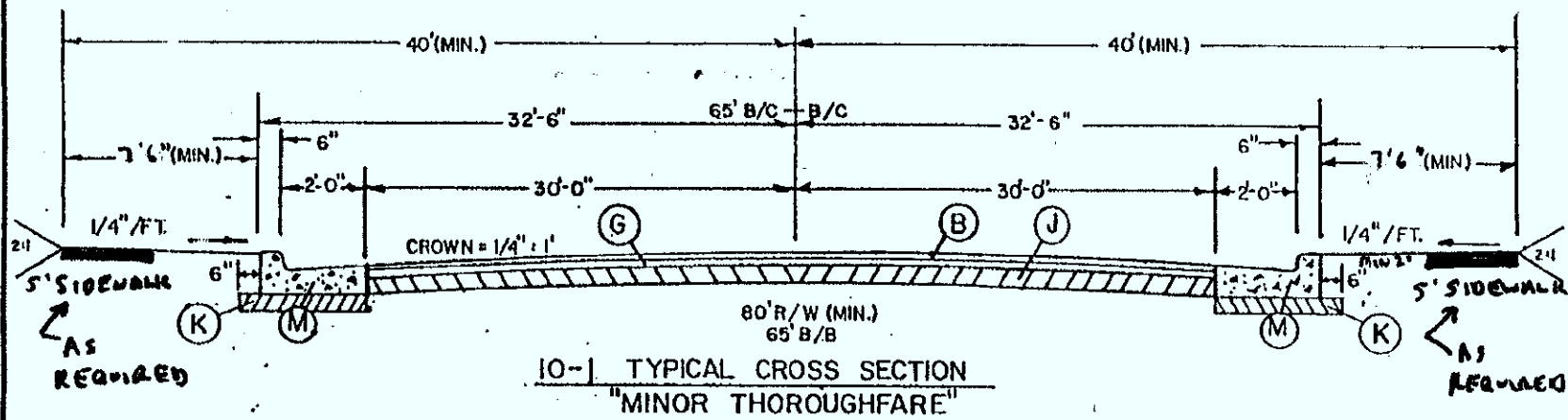
NO.	DATE	DESCRIPTION
1	7/1/97	REVISED

APPROVED: DATE 7/1/97

PLANNED INDUSTRIAL STREET
(NON-CURB & GUTTER)

CITY OF GREENVILLE, N. C. ENGINEERING DIVISION

STD. NO.	REV.
35.07	



NOTE:

PAVEMENT DESIGN TO BE ACCORDING TO PROCEDURE DESCRIBED IN STD. NO. 40.01

REVISIONS

NO.	DATE	DESCRIPTION

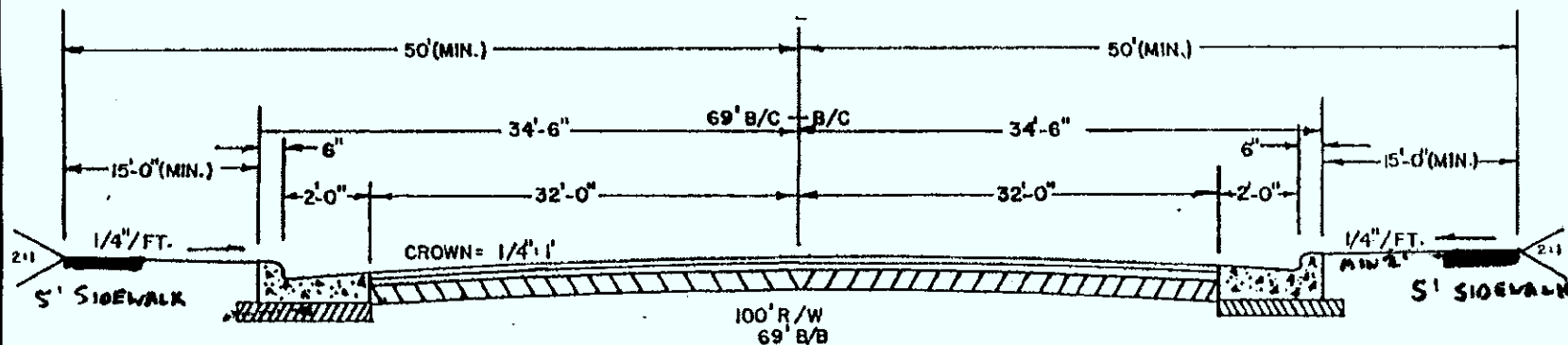
APPROVED: DATE May 8, 1980

STANDARD TYPICAL SECTION THOROUGHFARES

Item # 13

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

STD. NO.	REV.
3508	



10-1 TYPICAL CROSS SECTION
"MAJOR THOROUGHFARE"

REVISIONS

NO.	DATE	DESCRIPTION

PAVEMENT SCHEDULE TO BE DETERMINED
BY THE CITY ENGINEERING DEPARTMENT.

APPROVED: DATE May 8, 1980

STANDARD TYPICAL SECTION
MAJOR THOROUGHFARE

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
35 09	

NO. 301064

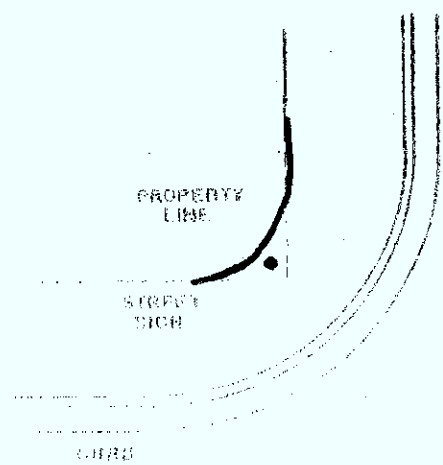
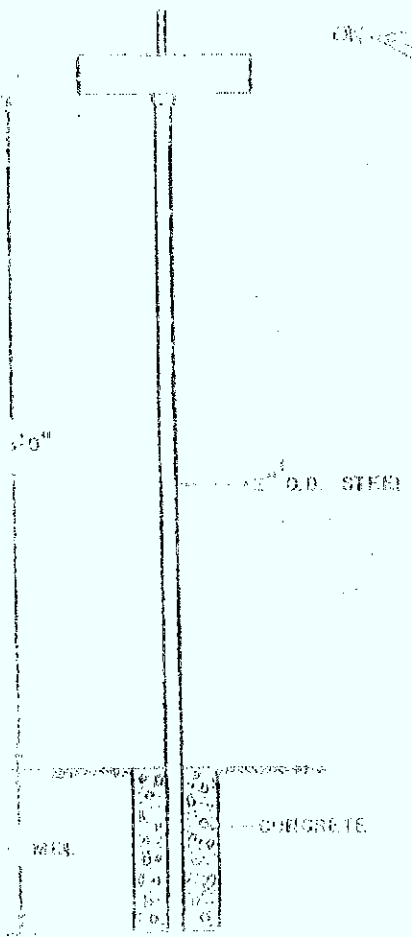


24", 30", OR 36"
1/2" TO 1"

4" LETTERS TO BE SERIES "D"
2" LETTERS TO BE SERIES "C"

ALL LETTERS AND BACKGROUND MATERIALS TO BE "SCOTCHLITE" OR AN APPROVED EQUAL AND MEET I.T.E. SPECIFICATIONS ON REFLECTIVITY.

SIGNS SHALL BE GREEN BACKGROUND WITH WHITE LETTERS



STREET NAME SIGN TO BE ONE FOOT FROM PROPERTY LINE IF SAID LINES WERE EXTENDED

REVISIONS	
REV. DATE	DESCRIPTION

5.) DEVELOPER RESPONSIBLE FOR INSTALLATION OF ALL STREET SIGNS.

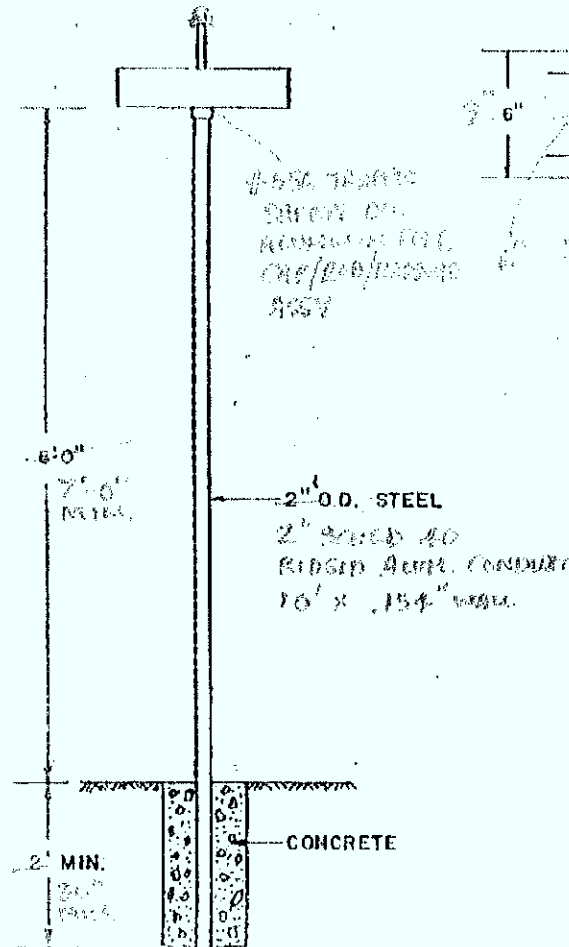
APPROVED DATE 10/18/00

STREET NAME SIGNS

CITY OF CHARLESTON, SOUTH CAROLINA - DEPARTMENT OF PUBLIC WORKS

ISSUED BY: [Signature]

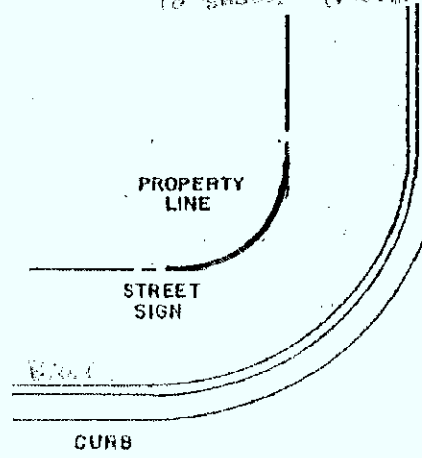
FROM STREET SIGN SPECIFICATIONS



1. 4" LETTERS TO BE SERIES "B" (1 1/2" HIGH)
2. 2" LETTERS TO BE SERIES "C" (1 1/2" HIGH)

ALL LETTERS AND BACKGROUND MATERIALS TO BE "SCOTCHLITE" OR AN APPROVED EQUAL AND MEET I.T.E. SPECIFICATIONS ON REFLECTIVITY.

3. SIGNS SHALL BE GREEN BACKGROUND WITH WHITE LETTERS AND WHITE BORDER.
4. MATERIALS TO BE USED: BASE SHEETING SHALL BE 3-MIL THICK HIGH-DENSITY POLYETHYLENE (OR EQUIV.), DIGITAL LETTER MARK USING 3-MIL (175-C TRANSLUCENT) EC GREEN FILM. ALSO A .50" BORDER TO SIGN. (NOTE: 3-MIL D53 MATERIAL ACCEPTABLE ALTERNATE)
5. ALUMINUM SIGN BLANK MATERIAL TO BE .020" THICK W/ 1.5" RADIUS CORNERS, 2-BLOCKS PER SIGN FACE.



RECOMMENDED INSTALLATION

1. STREET NAME SIGN TO BE ONE' FROM PROPERTY LINE IF SAID LINES WERE EXTENDED.
2. SIGNS SHOULD NOT BE PLACED NEAR S.W.C. TO THE ROAD.
3. SIGN LOCATION TO BE PLACED ON THE SIDE OF ROAD INDICATED.
4. SIGN LOCATION SHALL BE APPROVED BY THE CITY ENGINEER.

S) DEVELOPER RESPONSIBLE FOR INSTALLATION OF ALL STREET SIGNS.

APPROVED: DATE May 8, 1980

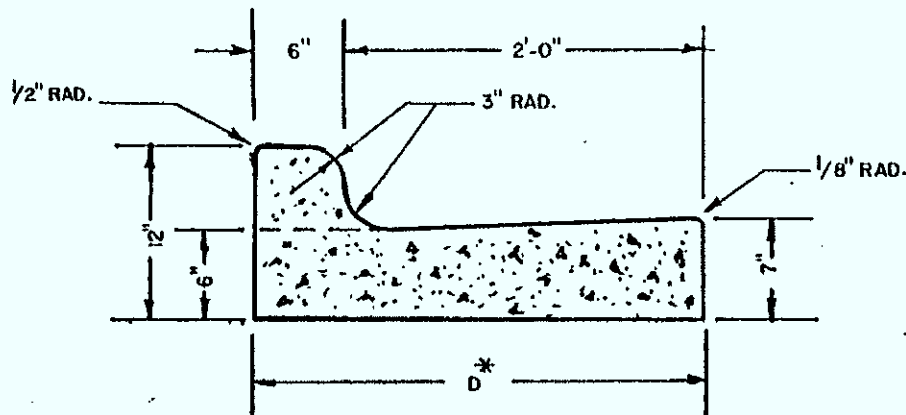
REVISIONS		
NO.	DATE	DESCRIPTION
1	10/21/80	REV. PLAN, FOR INSURANCE

STREET NAME SIGNS

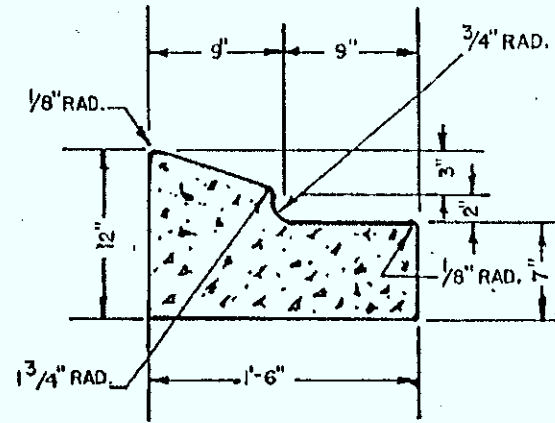
CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
75 11	

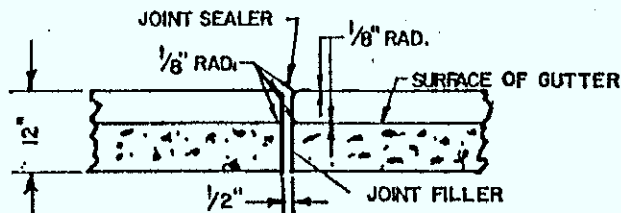


2'-6" CURB AND GUTTER



1'-6" CURB AND GUTTER
(TO BE USED IN MEDIANS ONLY)

D* : 24" CURB AND GUTTER SHALL BE PLACED IN RESIDENTIAL DEVELOPMENTS OR AS PROVIDED IN SEC 40.00 OF THIS MANUAL.
30" CURB AND GUTTER SHALL BE PLACED IN *NECOT R/W.*



TRANSVERSE EXPANSION JOINT
IN CURB AND GUTTER

GENERAL NOTES:

CONTRACTION JOINTS SHALL BE SPACED AT 10' INTERVALS, EXCEPT THAT A 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.

CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1 1/2" SHALL BE OBTAINED.

ALL CONTRACTION JOINTS SHALL BE FILLED WITH JOINT FILLER.

EXPANSION JOINTS SHALL BE SPACED AT 90' INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS.

ALL CURB AND GUTTERS ARE TO BE POURED WITH CLASS "A" CONCRETE. (3000 PSI)

FLEXIBLE FORMS ARE TO BE USED WHEN RADII IS LESS THAN 200.

REVISIONS

NO.	DATE	DESCRIPTION

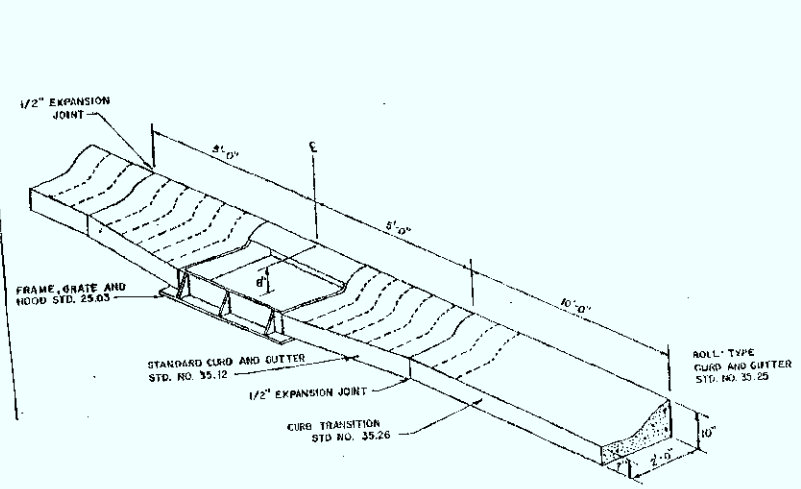
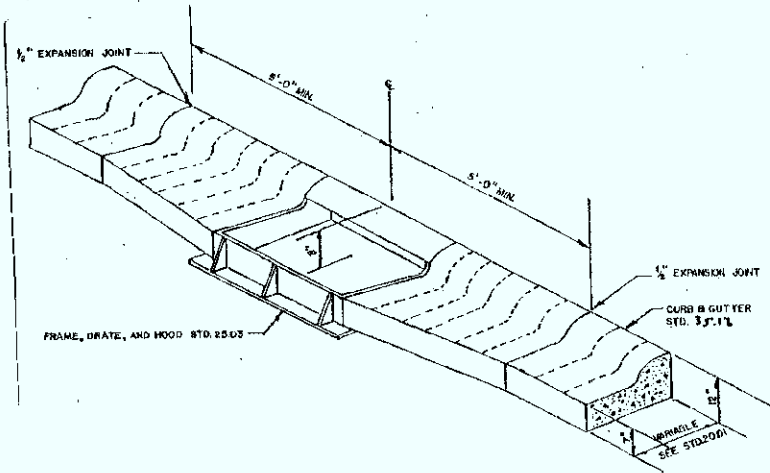
APPROVED: DATE May 8, 1980

STANDARD CURB AND GUTTER

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

Item # 12

STD. NO.	REV.
35 12	



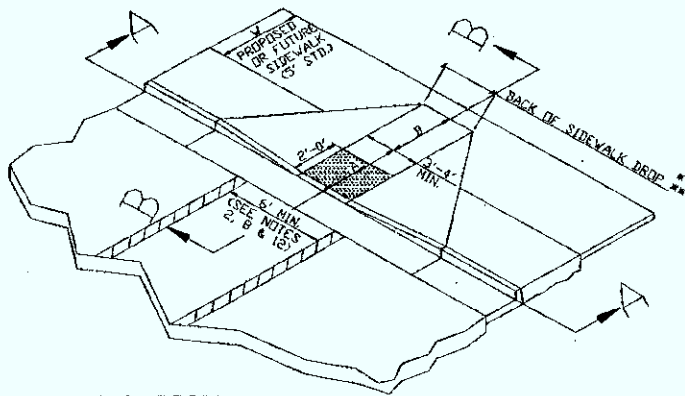
REVISIONS

NO.	DATE	DESCRIPTION

APPROVED: DATE May 8, 1980

STANDARD CATCH BASIN FRAME IN CURB AND GUTTER
 Item # 13
 CITY OF GREENVILLE, N.C.—ENGINEERING DEPT.

STD. NO.	REV.
35.14	



ISOMETRIC VIEW

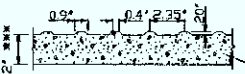
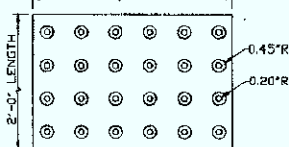


NOTES:

1. DETECTABLE WARNING DOMES SHALL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
2. THE RAMP MAY BE ~~BLACK IN COLOR~~ OR ANY COLOR WITH A 70% CONTRAST RATIO.

ADD APPROVED BY CITY ENGINEER.

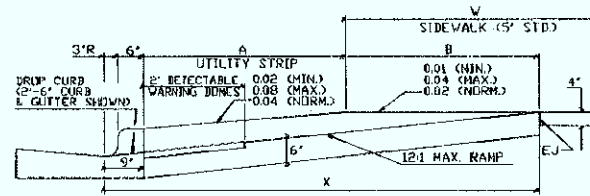
RAMP WIDTH AREA IS VARIABLE



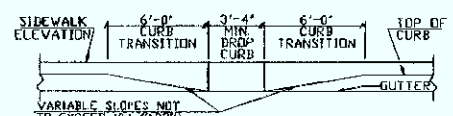
DETECTABLE WARNING DOMES

W	A	W+A+9'	X	B
5'	0.0'	5.8'	5.8'	5.0'*
6'	0.0'	6.8'	6.8'	6.0'***
7'	0.0'	7.8'	7.3'	6.5'***
8'	0.0'	8.8'	7.3'	6.5'***
5'	1.5'	7.3'	7.5'	5.2'
5'	2.0'	7.8'	7.8'	5.0'
5'	2.5'	8.3'	8.1'	4.8'
5'	3.0'	8.8'	8.3'	4.4'
5'	3.5'	9.3'	8.4'	4.1'
5'	4.0'	9.8'	9.6'	3.8'
5'	4.5'	10.3'	9.7'	3.4'
5'	5.0'	10.8'	8.9'	3.1'

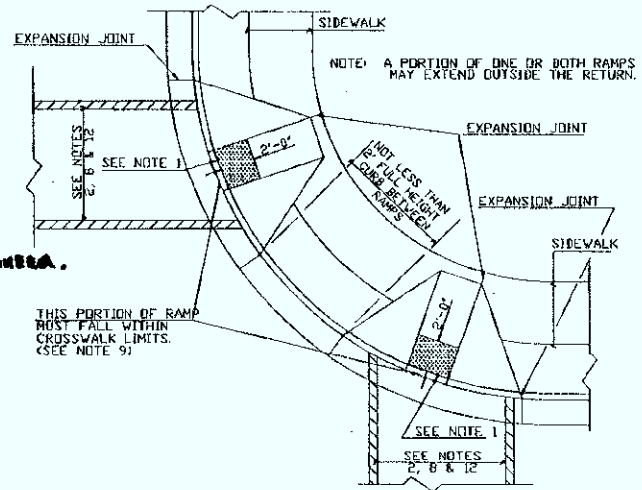
- B = X - (A + 9')
- B = DISTANCE FROM FRONT EDGE OF SIDEWALK TO BACK POINT OF 12:1 (6.33%) SLOPE.
- * BACK OF SIDEWALK DROP REQUIRED FOR ALL SIDEWALK SLOPES.
- ** BACK OF SIDEWALK DROP REQUIRED FOR SIDEWALK SLOPES 0.04.
- *** THICKNESS MAY VARY FOR APPROVED EQUAL PRECAST MATERIAL.



SECTION B-B



SECTION A-A



PLAN VIEW

DUAL RAMPS ANY RADII (40' MIN. FLOOR WIDTH)

REVISIONS

NO	DATE	DESCRIPTION
1	8/19/05	REVISED TO MEET ADA REQUIREMENTS

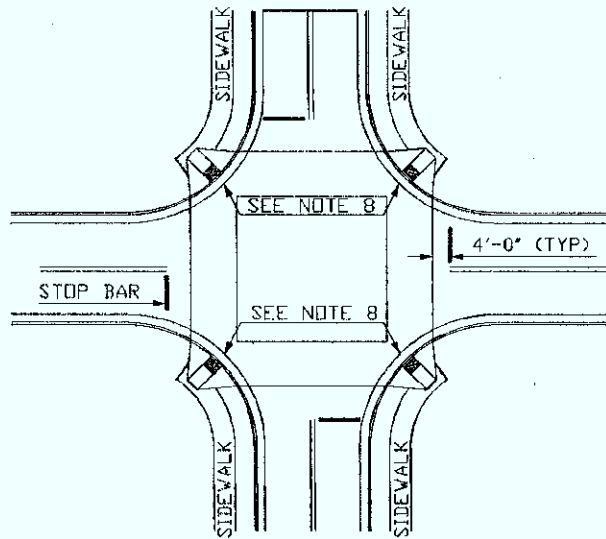
APPROVED: DATE _____

STANDARD DETAIL WHEELCHAIR RAMP

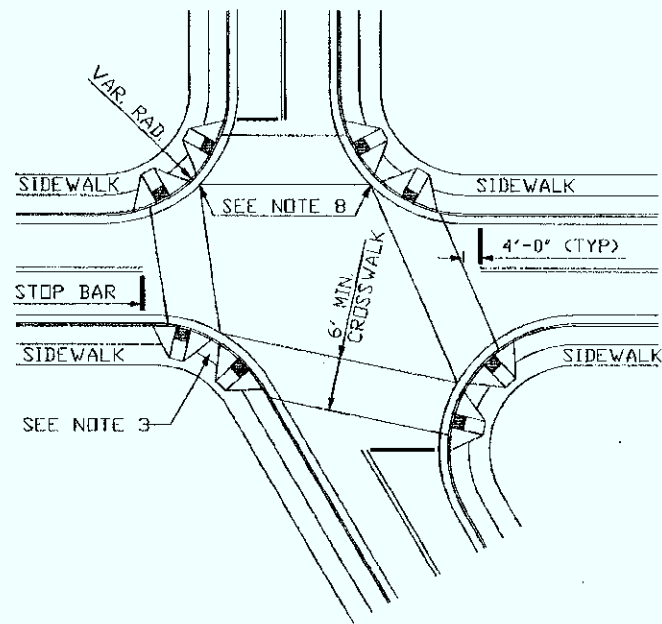
CITY OF GREENVILLE, N.C.-ENGINEERING DEPT.

STD. NO.	REV.
35.16	B

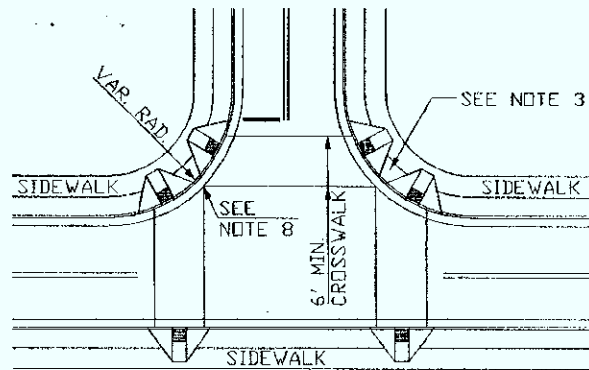
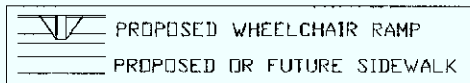
Item # 10



DETAIL SHOWING TYPICAL LOCATION OF SINGLE WHEELCHAIR RAMP, PEDESTRIAN CROSSWALKS AND STOP LINES



DETAIL SHOWING TYPICAL LOCATION OF DUAL WHEELCHAIR RAMP, PEDESTRIAN CROSSWALKS AND STOP LINES



DETAIL SHOWING TYPICAL LOCATION OF WHEELCHAIR RAMP, PEDESTRIAN CROSSWALKS AND STOP LINES FOR TEE INTERSECTIONS

REVISIONS

NO.	DATE	DESCRIPTION
1	8/19/05	REVISED TO MEET ADA REQUIREMENTS

APPROVED: DATE _____

STANDARD DETAIL WHEELCHAIR RAMP PLACEMENT
CITY OF GREENVILLE, N.C.-ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
35.17	B

NOTES:

1. CONSTRUCT THE WALKING SURFACE OF THE DETECTABLE DOMES WITH SLIP RESISTANCE AND A 70% CONTRASTING COLOR TO THE SIDEWALK.
2. CROSSWALK WIDTHS AND CONFIGURATION VARY BUT MUST CONFORM TO TRAFFIC DESIGN STANDARDS.
3. PROVIDE WHEELCHAIR RAMPS AT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. LOCATE WHEELCHAIR RAMPS AS DIRECTED BY THE ENGINEER WHERE EXISTING LIGHT POLES, FIRE HYDRANTS, DROP INLETS, ETC. AFFECT PLACEMENT. WHERE TWO RAMPS ARE INSTALLED PLACE NOT LESS THAN 2 FEET OF FULL HEIGHT CURB BETWEEN THE RAMPS. PLACE DUAL RAMPS AS NEAR PERPENDICULAR TO THE TRAVEL LANE BEING CROSSED AS POSSIBLE.
4. DO NOT EXCEED 0.08 (12:1) SLOPE ON THE WHEELCHAIR RAMP IN RELATIONSHIP TO THE GRADE OF THE STREET.
5. CONSTRUCT WHEELCHAIR RAMPS 40" (3'-4") OR GREATER FOR DUAL RAMPS.
6. USE CLASS "B" CONCRETE WITH A SIDEWALK FINISH IN ORDER TO OBTAIN A ROUGH NON-SKID TYPE SURFACE.
7. PLACE A 1/2" EXPANSION JOINT WHERE THE CONCRETE WHEELCHAIR RAMP JOINS THE CURB.
8. PLACE THE INSIDE PEDESTRIAN CROSSWALK LINES NO CLOSER IN THE INTERSECTION BY BISECTING THE INTERSECTION RADIUS, WITH ALLOWANCE OF A 4' CLEAR ZONE IN THE VEHICULAR TRAVELWAY WHEN ONE RAMP IS INSTALLED.
9. COORDINATE THE CURB CUT AND THE PEDESTRIAN CROSSWALK LINES SO THE FLOOR OF THE WHEELCHAIR RAMP WILL FALL WITHIN THE PEDESTRIAN CROSSWALK LINES. PLACE DIAGONAL RAMPS WITH FLARED SIDES SO 24" OF FULL HEIGHT CURB FALLS WITHIN THE CROSSWALK MARKINGS ON EACH SIDE OF THE FLARES.
10. CONSTRUCT THE PEDESTRIAN CROSSWALK A MINIMUM OF 6 FEET. A CROSSWALK WIDTH OF 10 FEET OR GREATER IS DESIRABLE.
11. USE STOP LINES, NORMALLY PERPENDICULAR TO THE LANE LINES, WHERE IT IS IMPORTANT TO INDICATE THE POINT BEHIND WHICH VEHICLES ARE REQUIRED TO STOP IN COMPLIANCE WITH A TRAFFIC SIGNAL, STOP SIGN OR OTHER LEGAL REQUIREMENT. AN UNUSUAL APPROACH SKEW MAY REQUIRE THE PLACEMENT OF THE STOP LINE TO BE PARALLEL TO THE INTERSECTING ROADWAY.
12. PLACE ALL PAVEMENT MARKINGS IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION AND THE NORTH CAROLINA SUPPLEMENT TO THE MUTCD.
13. OTHER DETECTABLE WARNING MATERIALS MAY BE CONSIDERED FROM THAT SHOWN, BUT REQUIRE CITY ENGINEER'S WRITTEN APPROVAL PRIOR TO INSTALLATION.
14. FOR ALL ROADS WITH RADII 25' OR LESS, ONLY ONE WHEELCHAIR RAMP IS REQUIRED. WHEELCHAIR RAMPS TO BE PLACED AS PER TRAFFIC DESIGN STANDARDS TO INSURE PEDESTRIANS ENTER & EXIT WITHOUT ENTERING TRAVEL LANES.

REVISIONS

NO	DATE	DESCRIPTION
1	8/19/05	REVISED TO MEET ADA REQUIREMENTS

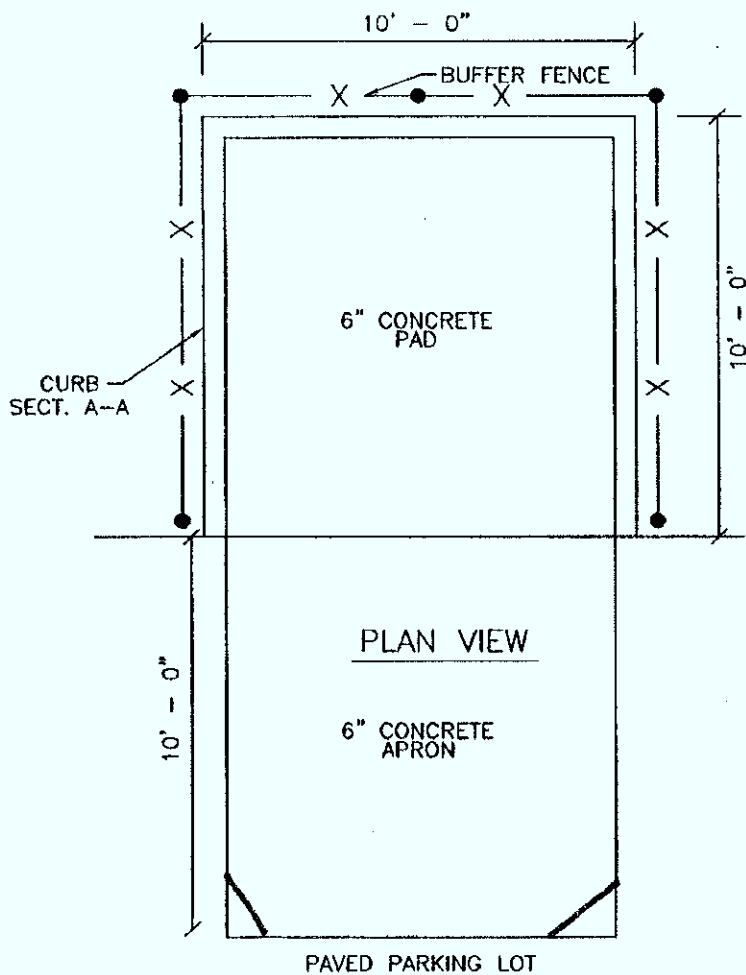
APPROVED DATE _____

STANDARD WHEELCHAIR RAMP NOTES

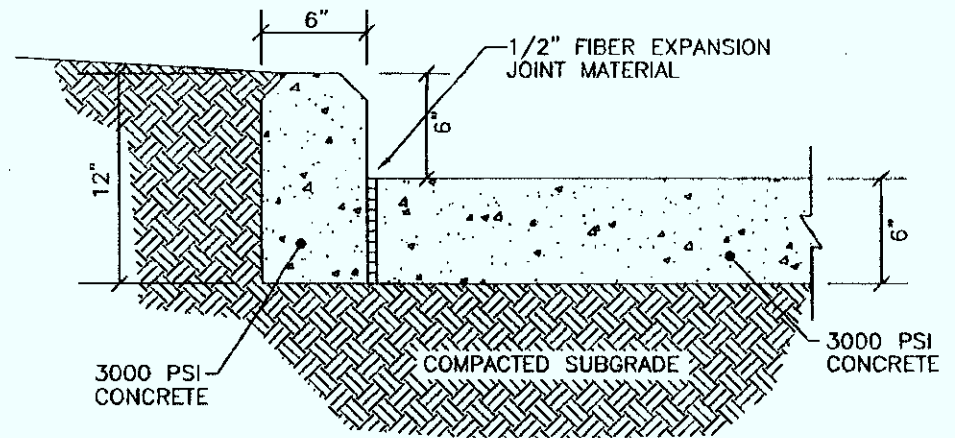
CITY OF GREENVILLE, N.C.-ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
35.18	B

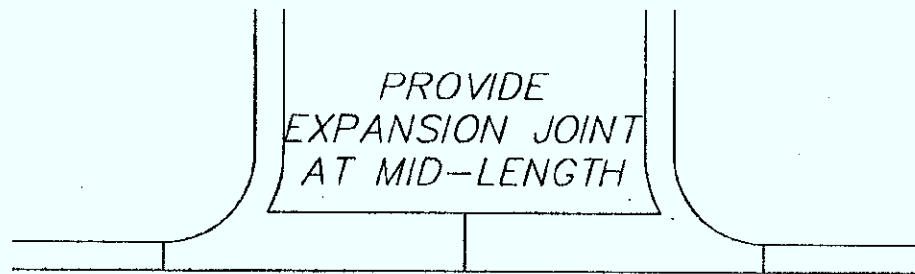


** May be replaced with standard curb + gutter*

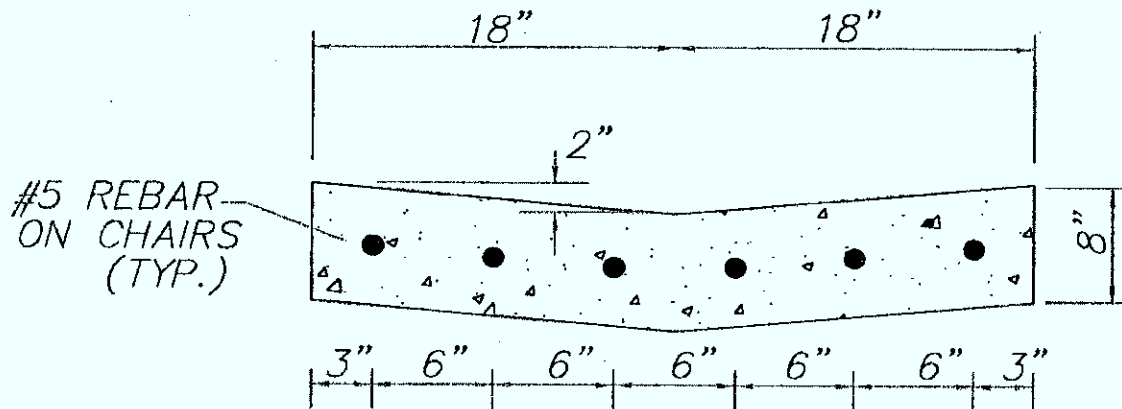


CONTAINER PAD MUST BE FLUSH WITH PARKING LOT PAVEMENT.

DUMPSTER PAD DETAIL

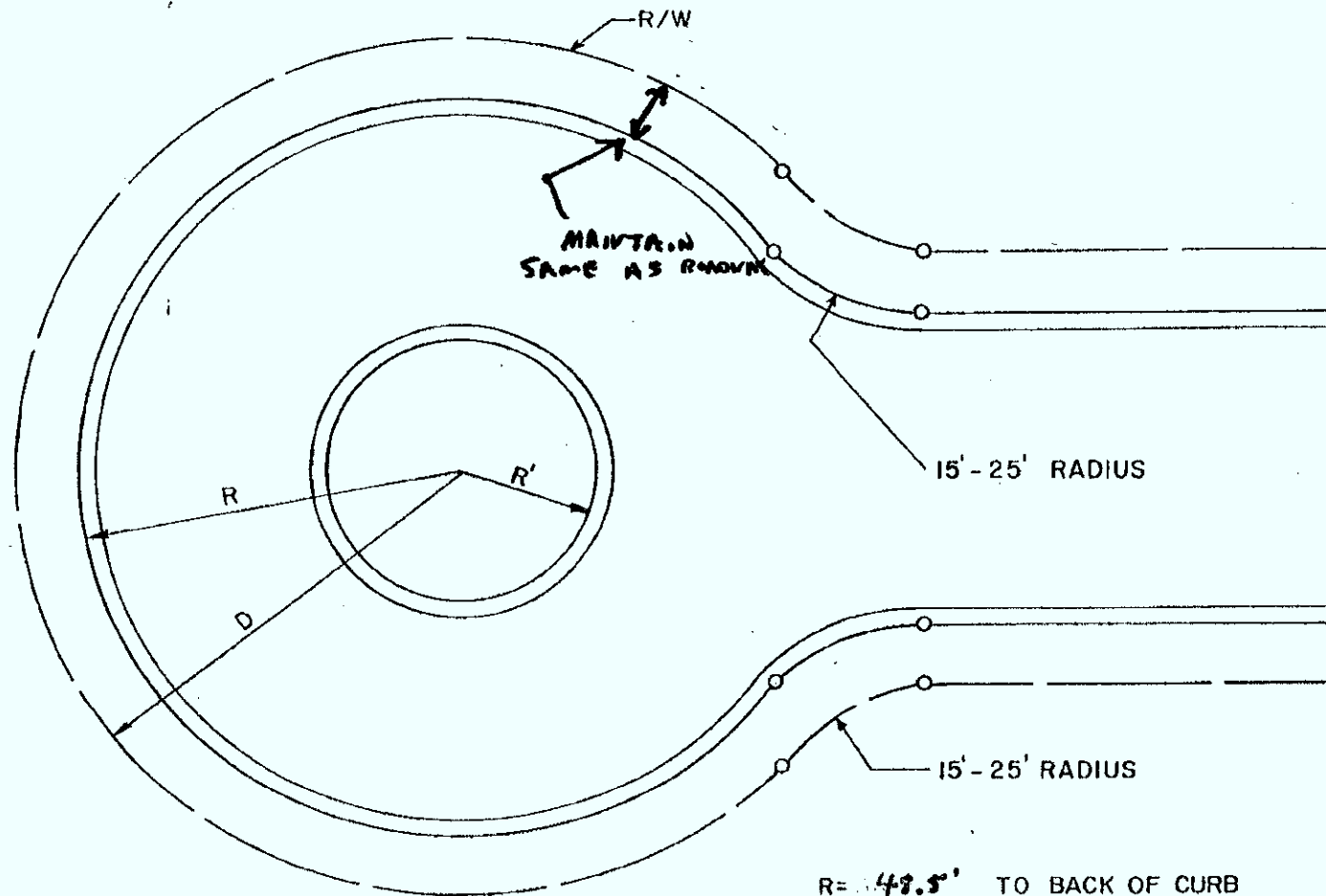


PLAN



SECTION

CONCRETE VALLEY GUTTER



NOTE: INTERIOR ISLAND IS NOT REQUIRED.

- 1.) ISLAND NOT PART OF R/W (COMMON SPACE)
- 2.) ISLAND TO BE MAINTAINED BY HOA.
- 3.) NO PARKING IN CULDESAC.
- 4.) MAINTAIN CURB OF ISLAND.

R = 48.5' TO BACK OF CURB
 R' = 0' - 15' TO BACK OF CURB
 D = VARIES
 CUL DE SAC MAY BE OFFSET FROM CENTERLINE OF STREET

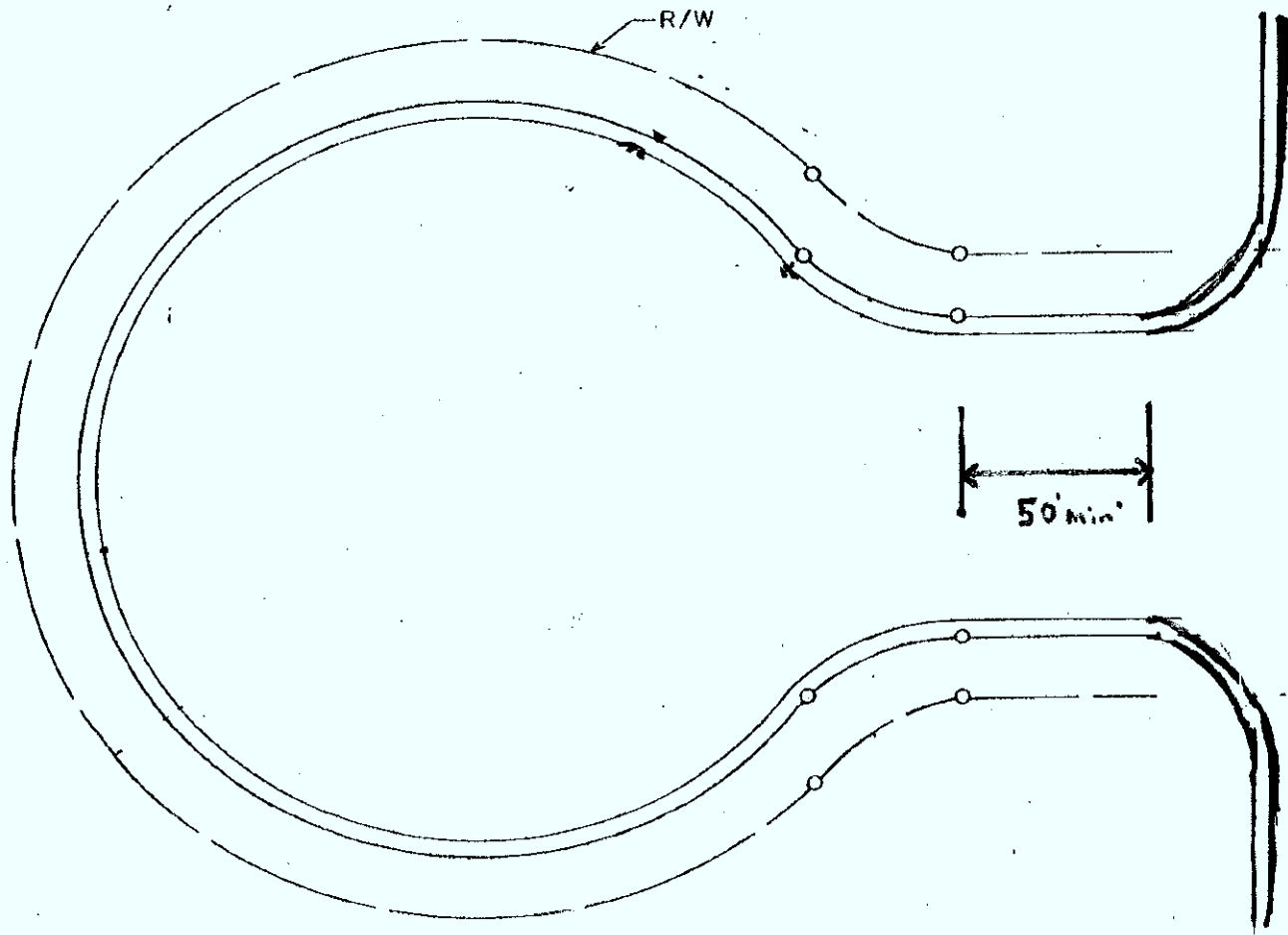
REVISIONS		
NO.	DATE	DESCRIPTION
1	2/2/85	ADDED NOTE

APPROVED: DATE 1-8-81

STANDARD CUL DE SAC

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

STD. NO.	REV.
35.23	1



REVISIONS

NO.	DATE	DESCRIPTION

APPROVED: DATE 10-01

MINIMUM CUL DE SAC LENGTH

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

Item # 13

STD. NO.	REV.
	1

ALL DEAD END ACCESS ROADS IN EXCESS OF 150 FEET SHALL BE PROVIDED WITH A PROPER FIRE APPARTUS TURNAROUND AS APPROVED IN APPENDIX D OF THE LATEST ADDITION OF THE NORTH CAROLINA FIRE CODE.

REVISIONS

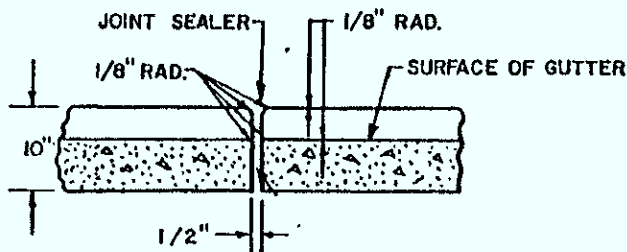
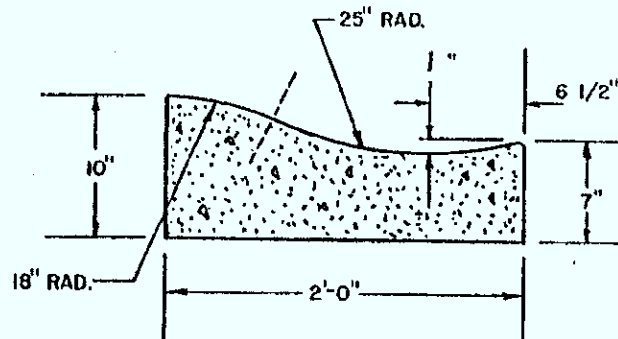
NO.	DATE	DESCRIPTION

APPROVED: DATE Mar. 12, 1981

TURNAROUND PROVISIONS

CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

STD. NO.	REV.
35.24	



TRANSVERSE EXPANSION JOINT
IN CURB AND GUTTER

GENERAL NOTES:

ALL CURB AND GUTTERS ARE TO BE POURED WITH CLASS "A" CONCRETE. (3,000 PSI)

FLEXIBLE FORMS ARE TO BE USED WHEN RADII IS LESS THAN 200'.

CONTRACTION JOINTS SHALL BE SPACED AT 10' INTERVALS, EXCEPT THAT A 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.

CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES, A MINIMUM DEPTH OF 1-1/2" SHALL BE OBTAINED.

EXPANSION JOINTS SHALL BE SPACED AT 90' INTERVALS, AND ADJACENT TO ALL RIGID OBJECTS.

APPROVED: DATE SEPT. 4, 1989

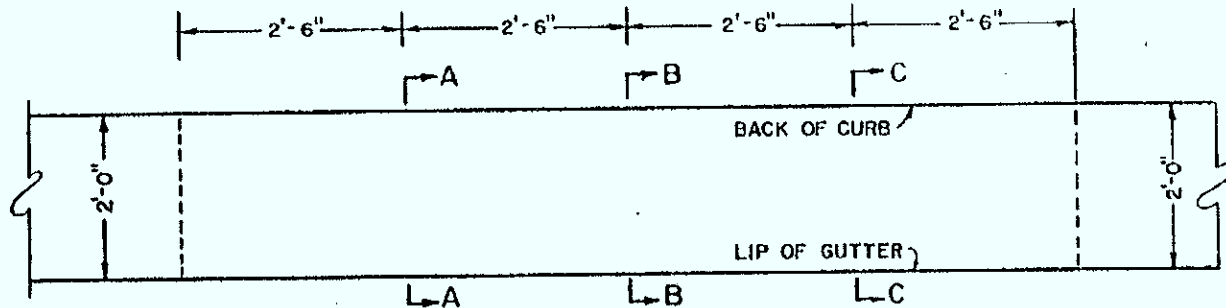
REVISIONS		
NO.	DATE	DESCRIPTION

STANDARD ROLL-TYPE CURB AND GUTTER

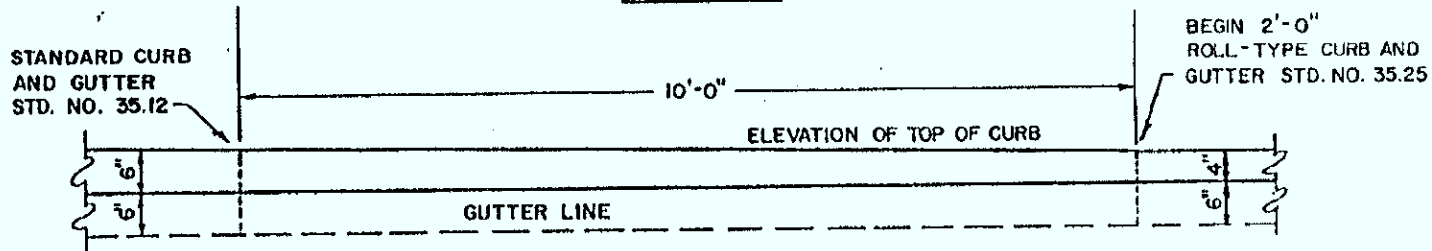
CITY OF GREENVILLE, N.C.—ENGINEERING DEPT.

Item # 13

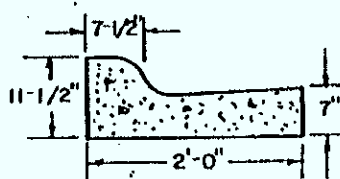
STD. NO.	REV.
75 05	



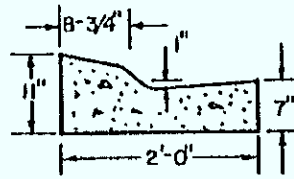
PLAN VIEW



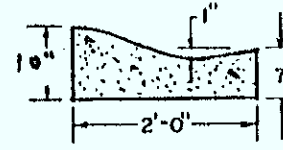
FRONT ELEVATION



SECTION A-A



SECTION B-B



SECTION C-C

GENERAL NOTES:

TRANSITION IS NOT TO BE LOCATED WITHIN THE CURB RADIUS.

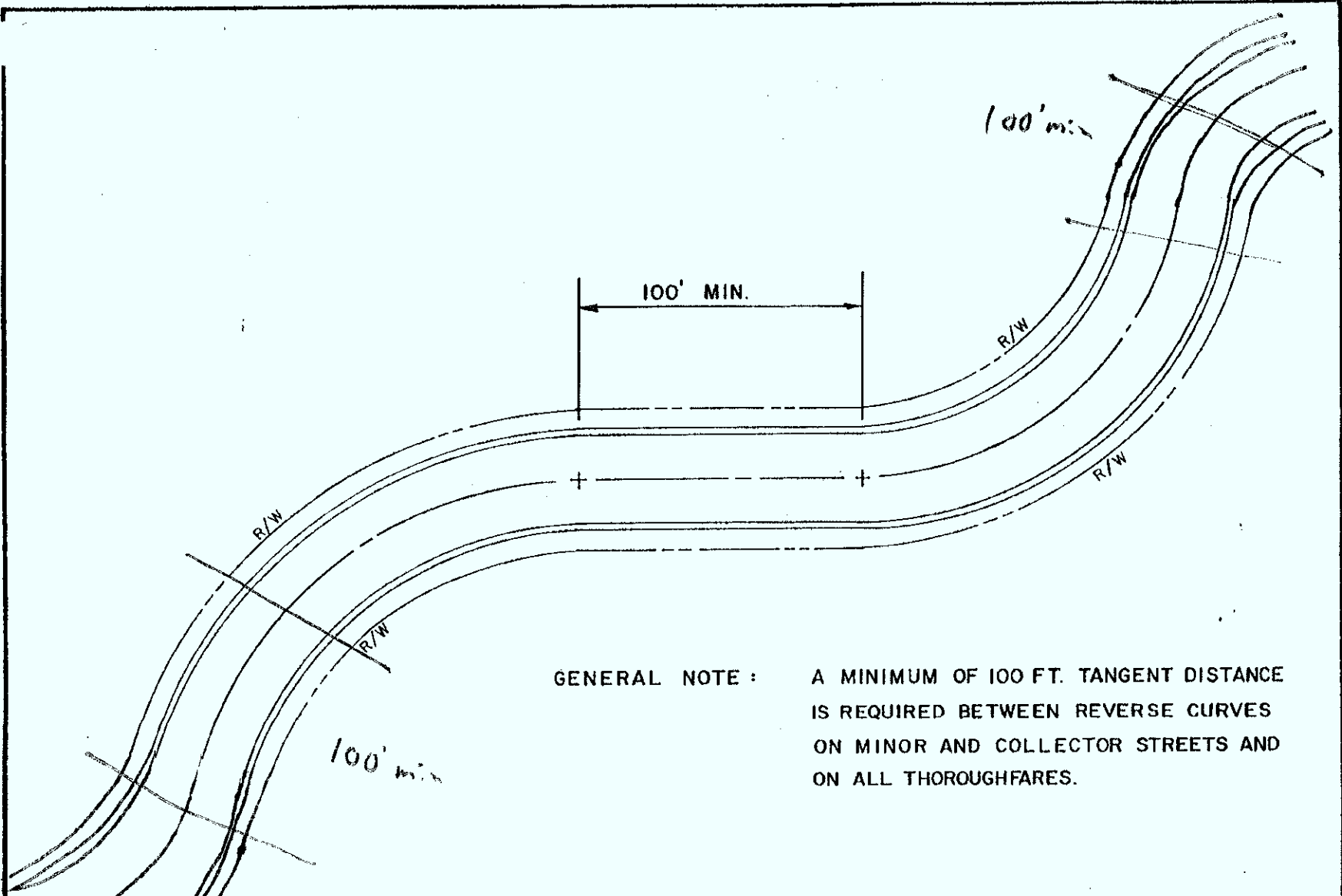
REVISIONS

NO.	DATE	DESCRIPTION

APPROVED: DATE SEPT. 14, 1989

CURB TRANSITION
2'-0" CURB AND GUTTER TO 2'-0" ROLL TYPE CURB AND GUTTER
CITY OF GREENVILLE, N.C. — ENGINEERING DEPT.

STD. NO.	REV.
35.26	



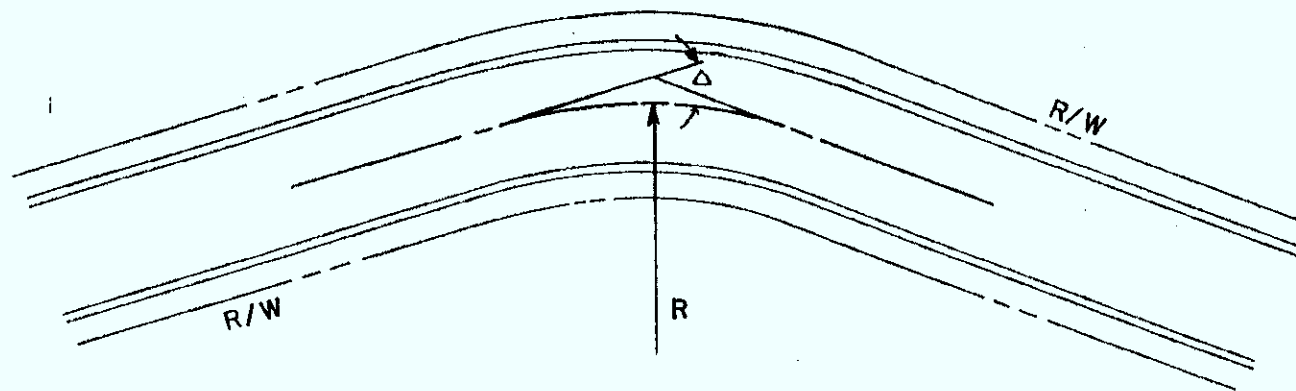
GENERAL NOTE : A MINIMUM OF 100 FT. TANGENT DISTANCE IS REQUIRED BETWEEN REVERSE CURVES ON MINOR AND COLLECTOR STREETS AND ON ALL THOROUGHFARES.

REVISIONS		
NO.	DATE	DESCRIPTION

APPROVED: DATE SEPT. 14, 1989

TANGENT DISTANCES AT REVERSE CURVES
 CITY OF GREENVILLE, N.C.—ENGINEERING DEPT.

STD. NO.	REV.
35.29	



GENERAL NOTE : WHEN CONNECTING STREET CENTERLINES DEFLECT FROM EACH OTHER AT ANY ONE POINT BY MORE THAN FIVE DEGREES, ($\Delta > 5^\circ$), THEY SHALL BE CONNECTED BY A CURVE WITH A RADIUS OF NOT LESS THAN 100 FEET ($R \geq 100'$) FOR MINOR STREETS. FOR COLLECTOR STREETS AND THOROUGHFARES, THE RADIUS SHOULD BE SUFFICIENT TO INSURE A SIGHT DISTANCE ADEQUATE FOR VISABILITY AND SAFETY, CONSIDERING THE CHARACTER OF THE STREET AND THE TYPES AND SPEED OF TRAFFIC ANTICIPATED, BUT IN NO CASE SHALL SUCH RADIUS BE LESS THAN 200 FEET ($R \geq 200$).

REVISIONS

NO.	DATE	DESCRIPTION

APPROVED: DATE SEPT. 14, 1989

CURVE RADIUS AT DEFLECTING STREET LINES

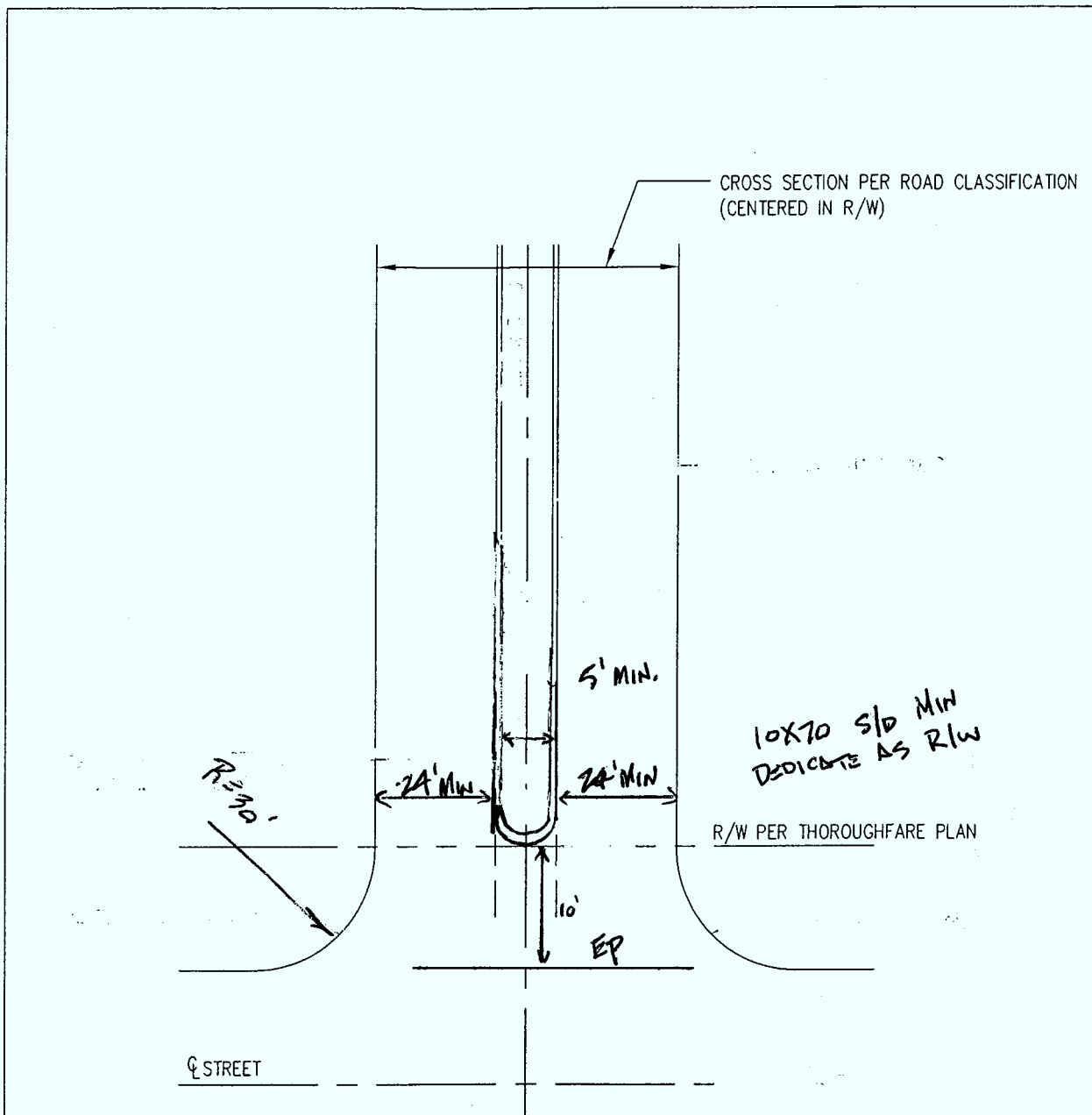
CITY OF GREENVILLE, N.C.—ENGINEERING DEPT.

STD. NO.	REV.
35.30	

Vertical Curve Table

(mph) Design Speed	(ft) Min Stopping Sight Distance	(ft) Min CL Radius	(ft) K (crest)	(ft) K (Sag)	(ft) K (Stop)
25	155	150	26	26	12
30	200	230	37	37	19
35	250	340	49	49	29
40	305	475	64	64	44
45	360	640	79	79	61
50	425	825	96	96	84
55	495	1050	115	115	114

VERTICAL CURVE DESIGN TABLE



ISLANDS OR SHORT MEDIANS AT SUBDIVISION ENTRANCES

THE CITY OF GREENVILLE WILL REVIEW REQUEST FOR THE ALLOWANCE OF ISLANDS OR SHORT MEDIANS DESIRED FOR AESTHETICS ON THE CITY OF GREENVILLE ROAD SYSTEM AT THE ENTRANCE TO SUBDIVISIONS. APPROVAL WILL BE WITH THE FOLLOWING UNDERSTANDING:

1. THE CITY ENGINEER MAY ALLOW THE ISLAND OR MEDIAN SECTION AFTER REVIEW ON AN INDIVIDUAL BASIS. DETAILED PLANS ARE REQUIRED SHOWING ALL PROPOSED PLANTINGS, AND STRUCTURES INCLUDING BUT NOT LIMITED TO SIGNAGE, LIGHTING AND IRRIGATION. ALL STRUCTURES REQUIRE AN ENCROACHMENT AGREEMENT APPROVED BY CITY COUNCIL.
2. THE CITY WILL NOT MAINTAIN THE ISLAND OR MEDIAN SECTION, THIS IS THE SOLE RESPONSIBILITY OF THE DEVELOPER AND/OR PROPERTY OWNERS ASSOCIATION.
3. THE ISLAND OR MEDIAN SECTION WILL BE REMOVED IF NOT PROPERLY MAINTAINED.
4. ISLAND WIDTH SHALL BE A MINIMUM OF 5' BACK OF CURB TO BACK OF CURB OR 5 FEET FROM THE FACE OF THE STRUCTURE TO THE BACK OF CURB. NO STRUCTURE OR SIGN SHALL EXCEED 42" IN HEIGHT ABOVE THE TOP OF PAVEMENT EXCEPT STREET LIGHTING.

	STANDARD DRAWING
MEDIAN ISLAND AT SUBDIVISION OR COMMERCIAL ENTRANCE	Item # 13



City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

Title of Item: Resolution adopting the 2010 Local Hazard Mitigation Plan

Explanation: Local Hazard Mitigation Plans are required by the Federal Emergency Management Administration (FEMA) of municipalities and counties to receive assistance from the federal government in the event of a natural disaster. The City of Greenville's current Local Hazard Mitigation Plan was adopted on November 8, 2004.

The 2004 plan must be updated to reflect changes required by the State of North Carolina Department of Crime Control and Public Safety and FEMA. City Council appointed an Advisory Committee at the October 8, 2009, City Council meeting to advise staff during the plan update process.

Staff invited members of organizations and commissions/agencies that work in the areas of environmental planning, affordable housing, and emergency response to participate in the planning process. Staff has been working with the Advisory Committee and State officials to update the plan. The Committee met six times to provide specialized input, whose members included:

1. Mary Smith, Real Crisis Center
2. Tom LaCoste, Pitt County Red Cross
3. Lovella Perkins, Greenville Affordable Housing Loan Committee
4. Allan Thomas, Greenville Planning and Zoning Commission
5. Doug Branch, Greenville Fire-Rescue Battalion Chief
6. Les Everett, Greenville Chief Building Inspector
7. Tim Corley, Greenville Public Works Department Engineer
8. Billy Merrill, Greenville Public Works Department Floodplain Manager
9. Merrill Flood, Greenville Community Development Director
10. Tom Wisemiller, Greenville Community Development Department Staff Liaison
11. Jessica Christie and Ann Bunnell, Greenville Environmental Advisory Commission

The plan, prepared with input from the Advisory Committee, has been incorporated into the attached Local Hazard Mitigation Plan (LHMP) update. Governing bodies are required to adopt an LHMP as a condition to receive hazard mitigation grant awards. The plans serve the following additional purposes:

- To identify the different types of hazards and specify actions that the City will take to reduce its vulnerability to natural hazards, and minimize the impact of hazardous events in the future
- To identify activities and methods the City uses currently and continues to support, either in their current form or a modified form, and speed recovery and redevelopment following future disaster events
- To qualify the City for additional grant funding in the pre-disaster and post-disaster environment
- To demonstrate the City's firm commitment to hazard mitigation principles
- To comply with both State and Federal legislative requirements for local hazard mitigation plans
- To document and describe the City's public input process and plan preparation

State of North Carolina and FEMA's subsequent plan review may necessitate other plan revisions.

Fiscal Note: No direct cost associated with adopting the Plan. Adoption qualifies the City for future federal grants.

Recommendation: Approve the attached resolution adopting the City of Greenville 2010 Local Hazard Mitigation Plan.

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / click to download

 [Hazard Mitigation Plan](#)

 [Resolution Adopting the 2010 Local Hazard Mitigation Plan 868308](#)

RESOLUTION NO. 10-_____
RESOLUTION ADOPTING THE CITY OF GREENVILLE
2010 HAZARD MITIGATION PLAN

WHEREAS, the City of Greenville formerly established the Flood Recovery Task Force to discuss flood recovery issues and develop the City of Greenville Hazard Mitigation Plan; and

WHEREAS, the Flood Recovery Task Force and staff of the Department of Planning and Community Development held meetings to develop the original Hazard Mitigation Plan; and

WHEREAS, the North Carolina Division of Emergency Management (NCDEM) and the Federal Emergency Management Agency (FEMA) require revisions to the City's Hazard Mitigation Plan in accordance with the requirements of the Disaster Mitigation Act of 2000 in order to receive funding assistance in the instance of a disaster; and

WHEREAS, the City Council has appointed the Local Hazard Mitigation Plan Update Advisory Committee to work on such revisions, and that Advisory Committee has completed an update of the Hazard Mitigation Plan; and

WHEREAS, the updated Hazard Mitigation Plan, which was completed with the assistance of the Local Hazard Mitigation Plan Update Advisory Committee, has been completed and forwarded to NCDEM and FEMA for review; and

WHEREAS, the Hazard Mitigation Plan may be further revised in response to the NCDEM and FEMA review process; and

WHEREAS, the Hazard Mitigation Plan will be distributed to several city agencies, Pitt County Memorial Hospital, East Carolina University, surrounding municipalities, and other non-profit agencies and businesses; and

WHEREAS, the Hazard Mitigation Plan update has been completed in accordance with state and federal standards;

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Greenville that it does hereby adopt the City of Greenville 2010 Hazard Mitigation Plan.

This the 10th day of June, 2010.

Patricia C Dunn, Mayor

ATTEST:

Carol L. Barwick, City Clerk

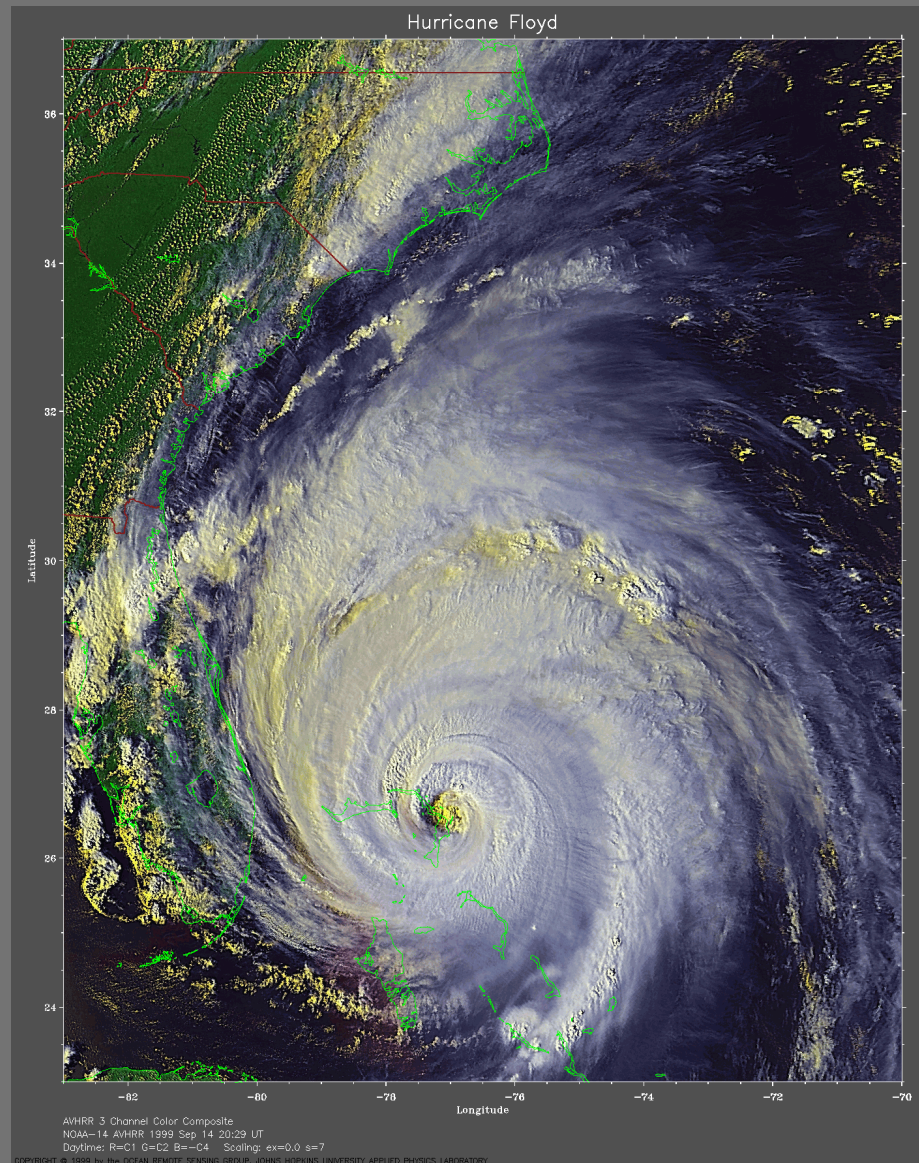
#868308

2010

Hazard Mitigation Plan

City of Greenville, North Carolina

This plan is designed to reduce Greenville's vulnerability to natural hazards, and minimize the impact of hazardous events in the future.



Department of Community Development
City of Greenville
6/10/2010

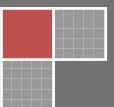




Table of Contents

INTRODUCTION 1

 A. Purpose & Authority 1

 B. Planning Process & Public Involvement 1

BACKGROUND & CAPABILITY ASSESSMENT 7

 A. Greenville: Community Profile 7

 B. City Staff, Boards & Organizational Capabilities 11

 C. Greenville’s Economic & Institutional Capabilities 12

 D. Legal & Fiscal Capabilities 12

 ❖ Regulations..... 13

 ❖ Acquisition of Property 15

 ❖ Taxation 15

 ❖ Spending 16

 ❖ Fiscal Capability..... 16

 E. Technological Capabilities 19

 F. Political Capabilities..... 20

HAZARD IDENTIFICATION & VULNERABILITY 21

 A. POTENTIAL HAZARDS..... 21

 ❖ Flooding..... 22

 ❖ Hurricanes & Tropical Storms 23

 ❖ Severe Winter Storms 35

 ❖ Nor’Easters 36

 ❖ Wildfires..... 38

 ❖ Earthquakes..... 39

 B. Vulnerability Analysis 41

 C. Impact Analysis & Likelihood of Occurrence 42

VULNERABILITY ASSESSMENT..... 45

 A. Land Use Vulnerability..... 45

 B. Building & Infrastructure Vulnerability 47

 C. Critical Facilities 48

 D. Future Vulnerability..... 57

 E. Future Vulnerability: Critical Facilities 62



MITIGATION STRATEGY 64

A. Summary 64

B. Mitigation Goals & Objectives..... 64

C. Existing Mitigation Strategies 68

- ❖ Flood Damage and Prevention Ordinance..... 68
- ❖ Community Rating System 69
- ❖ Minimum Housing Code 70
- ❖ Comprehensive Plan..... 70
- ❖ 2004 Greenway Master Plan 73
- ❖ Tar River Floodplain Redevelopment Plan 74
- ❖ Flood Land Reuse Plan..... 75
- ❖ Recreation and Parks Comprehensive Master Plan 2000-2020 78
- ❖ Emergency Management Plan 79
- ❖ Flood Information Library 79
- ❖ Spatial Data Explorer/Q3 Flood Data Online 80
- ❖ Special Needs Database..... 80
- ❖ Water Supply Watershed Overlay District..... 81
- ❖ Tree Planting and Protection Ordinance..... 81
- ❖ Stormwater Management Program 82

D. Future Implementation Strategies..... 83

- ❖ Comprehensive Infrastructure Plan 83
- ❖ Required Open Space Ordinance..... 83
- ❖ Post Disaster Recovery and Reconstruction Plan (PDRRP)..... 84
- ❖ All Hazards Information Library 85
- ❖ Critical Watershed Protection Areas 86
- ❖ Environmental Planner..... 86
- ❖ Center City – West Greenville Revitalization Plan 89
- ❖ Update the Tree Planting and Protection Ordinance 89
- ❖ Flood Insurance Rate Maps (FIRM's)..... 90
- ❖ City of Greenville, North Carolina Website 90

E. Implementation Timeline..... 91

F. Monitoring & Evaluation..... 94

INTRODUCTION

A. PURPOSE & AUTHORITY

As a condition to receiving Hazard Mitigation Grant Awards, the City of Greenville is required to prepare a Local Hazard Mitigation Plan (LHMP), which shall serve the following purposes:

- To document and describe the public process and plan preparation
- To identify the different types of hazards and specify new actions that the City will take to reduce its vulnerability to natural hazards, and minimize the impact of hazardous events in the future
- To identify activities and methods the City currently implements and continues to support, either in their current form or a modified form, and speed recovery and redevelopment following future disaster events
- To qualify for additional grant funding in the pre-disaster and post-disaster environment
- To demonstrate a firm local commitment to hazard mitigation principles
- To comply with both State and Federal legislative requirements for local hazard mitigation plans.

This plan intends to meet this goal through reviewing the following areas: hazard identification and analysis, probability of hazard events, Greenville’s vulnerability to hazards, mitigation capability, acceptability assessment, identification of goals and objectives, policies, implementation, monitoring, and evaluation and update of the plan once it has been approved and adopted. The Greenville City Council approved the original draft of the plan on Thursday, May 10, 2001. A revised draft of the plan was adopted by City Council on **November 8, 2004**. The resolution of adoption is located in the appendix of this plan. The plan was subsequently updated in 2010 and approved by City Council on **June 10, 2010**. This plan has been developed to be in accordance with current rules and regulations governing local hazard mitigation plans. The plan shall be routinely monitored to maintain compliance with North Carolina Senate Bill 300, and the Federal Disaster Mitigation Act of 2000.

B. PLANNING PROCESS & PUBLIC INVOLVEMENT

Initial planning phases for the development of the City of Greenville Hazard Mitigation Plan began not long after Hurricane Floyd swept through Eastern North Carolina in September of 1999. City Council held a series of public meetings to discuss disaster relief, relocation of homes and people, moratoriums on development, and mitigation efforts. In addition, council created a new division within the Department of Planning and Community Development known as the Flood Recovery Center. The Flood Recovery Center consisted of Planners, a sales coordinator, a relocation specialist, and a housing counselor.



City Planners were responsible for the following:

- Administration of the Hazard Mitigation Grant Program (HMGP)
- Administration of the Repair and Replacement Grant Program
- Administration of State Acquisition Relocation Funds (SARF)
- Assistance with the relocation of homeowners and tenants affected by the HMGP
- Coordinated efforts to write the first draft of the Hazard Mitigation Plan
- Coordinated applications for flood survivors to receive free elevation certificates
- Coordinated applications for flood survivors to receive free, voluntary demolitions
- Identified and inspected comparable housing units to insure housing was decent, safe and sanitary

The Sales Coordinator had the following responsibilities:

- Assisted with the marketing and sales of City-sponsored subdivisions
- Utilized infrastructure grant funds which subsidized the cost of infrastructure that lowered sales prices of housing

The Relocation Specialist had the following responsibilities:

- Assisted homeowners and tenants of properties purchased by the City using HMGP funding to find other places to live in across the City limits, and even into the county
- Worked with the Sales Coordinator with relocation to City-sponsored subdivision projects

The Housing Counselor had the following responsibilities:

- Assisted flood survivors in identifying assistance based on individual needs
- Administered Small Business Administration (SBA) loans to those flood survivors that qualified

The Hazard Mitigation Grant Program was continuously advertised in the local newspaper, The Daily Reflector, for early public review on floodplain management. Specifically, the December 12, 1999 issue outlined an effort to solicit public involvement. Carl Rees, Flood Recovery Center Director, Gloria Kesler, Housing Counselor, and Chantae Matthews, Planner were the primary staff involved in the Flood Recovery Center along with a few others. Many positions within this division were created as temporary full-time positions. In addition, a consultant named Pat Young of Holland Consulting Planners, Inc. composed the original draft of the plan.

The Affordable Housing Loan Committee (AHLC) was very involved in the Flood Recovery Process as a standing city committee. The AHLC was authorized to determine just compensation for flooded properties. The AHLC was a well-versed group in housing and redevelopment issues, which were so critical in the aftermath of Hurricane Floyd. After Hurricane Floyd, flood recovery issues, hazard mitigation and disaster recovery were discussed in length throughout these meetings in public forums about how the City of Greenville would recover from this devastating storm, and find ways to minimize impacts and potential damage of future natural hazards. A little less than a month after Hurricane Floyd, the Affordable Housing Loan Committee held a public meeting on



October 26, 1999 to discuss the Hazard Mitigation Grant Program (HMGP) and the application process for providing citizens with flood recovery assistance. Advertisements, notices and memos were sent out all over the City after this meeting. At this specific time, the number and locations of damaged properties had not been specifically identified. Merrill Flood, Deputy Director of Planning and Community Development and Pat Young of Holland Consulting Planners presented a map to the Affordable Housing Loan Committee on December 9, 1999 identifying the total properties that were flooded, and those that were eligible to receive State hazard mitigation funding. By the next meeting on December 20, 1999, Phase I of III of the Hazard Mitigation Grant Program was submitted to the State in order to receive assistance funding. As a part of the Hazard Mitigation Grant Program, the State informed City staff that a Local Hazard Mitigation Plan would be due in order to continue providing Greenville with funding.

An Unmet Needs Committee (private group) was also formed and had meetings to discuss hazard mitigation. Representatives from the following agencies/organizations attended Unmet Needs Committee meetings:

- City of Greenville Community Development Department
- Pitt County Planning Department
- Pitt County Department of Social Services
- Pitt County Department of Emergency Management
- Greenville Interfaith Disaster Recovery Team (GIFT)
- Pitt County United Way
- Salvation Army
- Hope After Floyd (mental health outreach – sponsored by state funds)
- Housing counselors representing all areas of Pitt County
- Legal Services of North Carolina
- State Emergency Response Team (SERT)

On February 10, 2000 the Greenville City Council appointed thirteen (13) citizens to serve on a Flood Recovery Task Force, which primarily consisted of members of the Affordable Housing Loan Committee, but also contained members of the Greenville Interfaith Disaster Recovery Team (GIFT), the Salvation Army, the United Way, and a local church (Sycamore Hill Missionary Baptist Church). Many of the members of the Flood Recovery Task Force also attended the Unmet Needs committee meetings. The Flood Recovery Task Force met a total of four times to discuss the formation of the first draft of this plan as well as discuss other disaster recovery issues. There was an opportunity for comments by the public at these meetings, which were held during the draft stages. A draft of the plan was given to the task force members to review on April 11, 2001. The plan was presented to members of the City's Planning and Zoning Commission on April 17, 2001 for their review and comments. The plan was also presented to the Flood Recovery Task Force a second time on April 25, 2001. A few of the members made specific suggestions on the content of the plan and stated that the final approvals would be forwarded no later than May 1, 2001. Table 1 gives a listing of the members of the Flood Recovery Task Force.



CITY OF GREENVILLE – HAZARD MITIGATION PLAN



Table 1:
Flood Recovery Task Force Members

<u>Member Name</u>	<u>Title/Group Represented</u>	<u>Address</u>
Martha Matthews	Vice President - Greenville Interfaith Disaster Recovery Team (GIFT)	P.O. Box 3945; Greenville, NC 27836
Major Fred Carver	Salvation Army	2337 Dickinson Ave; Greenville, NC 27834
Dr. Howard Parker	Pastor of Sycamore Hill Missionary Baptist Church	1001 Hooker Road; Greenville, NC 27834
Lynn Pharr	Executive Director - United Way of Greenville	P.O. Box 1028; Greenville, NC 27834
Dr. Nancy Mayberry	GIFT Board Member, East Carolina Professor of Foreign Languages	1903 East 9th Street; Greenville, NC 27858
Walter Council	Affordable Housing Loan Committee	410 M. L. King, Jr. Blvd.; Greenville, NC 27834
Evan Lewis, attorney	Affordable Housing Loan Committee	P.O. Box 7283; Greenville, NC 27835
Gloria Pearsall, Vice Chair	Affordable Housing Loan Committee	1533 Greenville Blvd.; Greenville, NC 27834
Dr. Umesh Gulati, Chairman	Affordable Housing Loan Committee	309 Queen Anne Road; Greenville, NC 27858
Paula Graham	Affordable Housing Loan Committee	1103 Johnson St.; Greenville, NC 27858
Wilma Dupree	Affordable Housing Loan Committee	411 Greenfield Blvd.; Greenville, NC 27834
Toya Sanders	Affordable Housing Loan Committee	132 Oakmont Dr, Apt H; Greenville, NC 27834
Iyeisa Simmons	Affordable Housing Loan Committee	204-58 Rollins Drive; Greenville, NC 27834

Upon making the final changes, the first draft of the plan was presented and approved by City Council on May 10, 2001.

The City of Greenville’s initial plan was approved in accordance with Senate Bill 300 and determined to be in full compliance as of May 7, 2002 contingent upon new FEMA requirements of the Federal Disaster Mitigation Act of 2000.



In 2004, a new committee of staff members was formed to update the changes associated with new requirements featuring the following members and their titles:

- Jason Pauling – Group Facilitator, Planner II – Long Range Planning
- Merrill Flood – Director of Planning & Community Development
- Carl Rees – Neighborhood Services Coordinator, Flood Recovery Supervisor*
- Gloria Kesler – Planner – Community Development, Housing Relocation Specialist*
- Chris Davis – Senior Planner – Community Development
- Neil Holthouser – Senior Planner – Long Range Planning
- Karen Gilkey – Planner – Community Development
- Chantae (Matthews) Gooby – Planner II – Current Planning, Planner – Flood Recovery*
- Christian Lockamy – GIS Specialist – Current Planning

** Position with the Flood Recovery Center*

This Hazard Mitigation Planning Team met a total of four (4) times to discuss the updates and changes to this plan based on the initial crosswalk review. An opportunity was provided for neighboring communities, agencies, businesses, academia, nonprofits, and other interested parties to be involved. The draft plan was mailed to the following for their review and comments:

- | | |
|---|---|
| 1) Pitt County (Planning & Health Depts.) | 9) Pitt County Memorial Hospital |
| 2) The Town of Ayden | 10) DSM Pharmaceuticals (business) |
| 3) The City of Winterville | 11) Pitt County Council on Aging (non-profit) |
| 4) The City of Farmville | 12) American Red Cross (non-profit) |
| 5) The Town of Bethel | 13) Salvation Army (non-profit) |
| 6) The Town of Fountain | 14) Habitat for Humanity (non-profit) |
| 7) Greenville Utilities Comm. (business) | 15) United Way (non-profit) |
| 8) East Carolina University (acadamia) | |

In addition, an ad was placed in the Daily Reflector (Greenville’s Newspaper) advertising that the City of Greenville would hold a public hearing for the Planning and Zoning Commission to solicit public comments on the plan. Additionally, this plan was taken before the City’s Environmental Advisory Commission for their review while in the draft phase. The Environmental Advisory Commission met on October 7, 2004 to discuss this plan and make recommendations. The Greenville Planning & Zoning Commission met on October 19, 2004 to discuss the plan, and hold a public hearing to reserve public comments. The final review for adoption came through City Council who met on November 8, 2004 to adopt the plan. A copy of the resolution of adoption is included with the plan.



2010 Plan Update

In 2010, the City of Greenville formed an Advisory Committee to update the plan. The committee was comprised of professionals who work in areas related to hazard mitigation planning, including City staff and members from other organizations:

- Thomas Wisemiller – Group Facilitator, Planner II – Planning Division
- Merrill Flood – Director of Community Development
- Doug Branch (on behalf of Sandy Harris) – Battalion Chief, of Life Safety Division – Fire and Rescue Department
- Les Everett – Chief Building Inspector – Public Works Department
- Billy Merrill – Floodplain Manager – Public Works Department
- Tim Corley – Head of Land Development Section – Public Works Department
- Mary Smith – Executive Director – Real Crisis Intervention, Inc.
- Tom LaCoste – Emergency Services Manager – Red Cross (Pitt County, NC)
- Anne Bunnell – Instructor, Department of Biology, East Carolina University – Environmental Advisory Commission
- Jessica Christie – Associate Professor in Art History, East Carolina University – Environmental Advisory Commission
- Lovella Perkins – Affordable Housing Loan Committee
- Allen Thomas – Planning and Zoning Commission

The Hazard Mitigation Plan Update Advisory Committee met a total of six (6) times to discuss updates and changes to the plan. An opportunity was provided for neighboring communities, agencies, businesses, academia, nonprofits, and other interested parties to be involved. A draft of the plan was mailed to the following groups/organizations for their review and comments:

- | | |
|--|---|
| 16) Pitt County (Planning & Health Depts.) | 24) Pitt County Memorial Hospital |
| 17) The Town of Ayden | 25) DSM Pharmaceuticals (business) |
| 18) The City of Winterville | 26) Pitt County Council on Aging (non-profit) |
| 19) The City of Farmville | 27) American Red Cross (non-profit) |
| 20) The Town of Bethel | 28) Salvation Army (non-profit) |
| 21) The Town of Fountain | 29) Habitat for Humanity (non-profit) |
| 22) Greenville Utilities Comm. (business) | 30) United Way (non-profit) |
| 23) East Carolina University (acadamia) | |

In addition, the plan was distributed to the City’s Environmental Advisory Commission and the Planning and Zoning Commission for its comments while in the draft phase. An ad was placed in the *Daily Reflector* (Greenville’s Newspaper) advertising that the City of Greenville would hold a public hearing for the City Council to solicit public comments on the plan. The Greenville City Council adopted the 2010 plan update on X-date. A copy of the resolution of adoption is included with the plan.

END OF SECTION



**BACKGROUND &
CAPABILITY ASSESSMENT**

A. GREENVILLE: COMMUNITY PROFILE

The City of Greenville is located in the Coastal Plain region of North Carolina in the eastern part of the state. The Tar/Pamlico River runs through Greenville, and serves as its main natural feature. Other natural features include Green Mill Run, Bells Branch, Hardee Creek, Meeting House Branch, Schoolhouse Branch, Harris Mill Run, Parkers Creek, Swift Creek and Fork Swamp. Swift Creek and Fork Swamp are located in the southern most portion of Greenville and actually empty into the Neuse River, and are part of the Neuse River Basin. The entire jurisdiction lies at or below an elevation of 25-feet above sea level, which is the City’s major challenge relating to natural disasters, particularly severe flooding. It is about 85 miles east of Raleigh, 41 miles southeast of Rocky Mount, 117 miles north of Wilmington, and about 170 miles west of Cape Hatteras. *(Source: North Carolina 2002 State Transportation Map)*. Greenville serves as the County Seat for Pitt County. Pitt County has a total land area of 656.5 square miles. The City of Greenville is composed of 35 square miles within its city limits, and roughly 66.6 square miles within its total jurisdiction (ETJ + City limits outside of the ETJ). The 2000 Census yielded a total population in Greenville of 60,476 people. In 2009, Greenville’s estimated population was 81,092, which was an 18.1 percent increase from 2004. Table 2 (on the following page) displays Greenville’s population and includes estimates through 2009. An expanded version of this table, including future projections, is provided in the future vulnerability section to anticipate population growth through the year 2029 based on a flat-line projection.



Table 2:
Greenville Population Analysis (Part I)

Year	Population	% change per year	Average annual% change per decade	Year	Population	% change per year	Average annual% change per decade	Year	Population	% change per year
1980	35,740	X	3.435	1990	46,305	-4.21	3.745	2000	61,209	5.215
1981	36,591	2.381		1991	47,400	2.365		2001	60,966	-0.4
1982	36,860	0.735		1992	48,238	1.768		2002	63,444	4.065
1983	37,791	2.526		1993	51,149	6.035		2003	65,799	3.712
1984	39,995	5.832		1994	52,070	1.801		2004	68,687	4.389
1985	40,297	0.755		1995	56,307	8.137		2005	69,312	0.910
1986	41,912	4.008		1996	58,900	4.605		2006	72,052	3.953
1987	43,130	2.906		1997	55,877	-5.13		2007	76,280	5.868
1988	44,748	3.751		1998	56,853	1.747		2008	81,092	6.308
1989	48,339	8.025		1999	58,175	2.325		2009	84,124	3.745

East Carolina University (ECU) had an enrollment of 27,703 students in the fall of 2009. Greenville comprises nearly 45 percent of the population for the entire county.

2000 Census: between 1990 and 2000, Greenville’s population increased by just over 30 percent, whereas the County’s population grew about 21 percent, and North Carolina’s total state population grew at about 22 percent. Much of the population growth was in the increase of the number of students that attend ECU and maintain households within the City, the increased number of retired aged individuals, and the amount of annexation, which consumed both land and people. Greenville had not experienced in-migration to explain the growth. At the time of the 2000 census, the average persons-per-household in Greenville was 2.18, and there were about 52.4 percent of non-family households. The City of Greenville contained 28,145 total dwelling units; 54 percent multi-family units, 34.6 percent single-family detached units, 6.6 percent single-family attached units, and 4.8 percent mobile homes. The amount of owner occupied units was 39.3 percent. (Source: U.S. Census Bureau Website (www.census.gov)).



As of May 2010, Greenville has an estimated 43,000 dwelling units, an increase of almost 15,000 units since the 2000 census, which reflects the city’s high rates of population growth in the last 10 years. The following table summarizes all (not just residential) planning and development permit requests submitted to the Community Development Department 1999 - 2003 and 2004 – 2008.

City of Greenville Development Requests: 1999 - 03, 2004 - 08

Type of Planning Request/Inspection	1999 - 2003	2004 - 2008
Building Permits (Zoning Review)	7,983	9,052
Site Plans	644	646
Rezoning Request	247	204
Voluntary Annexation Petition	167	179
Preliminary Plats (New/Minor Alt)	92	162
Final Plats (New/Minor Alt)	531	601

Much of Greenville’s rural character is beginning to become urbanized with the increasing expansion to the south, and the continued expansion of utility services to accommodate for severe sprawl. Surrounding communities include Winterville, Ayden, Farmville, Bethel and Simpson, all of which have also experienced a change in growth largely from people that have moved away from Greenville’s urban core as blight has begun to occur in some areas of the inner city. Table 3 gives a breakdown of Greenville’s land use composition inside the city limits, and within Greenville’s ETJ.

Table 3:
City of Greenville Existing Land Use (2010)

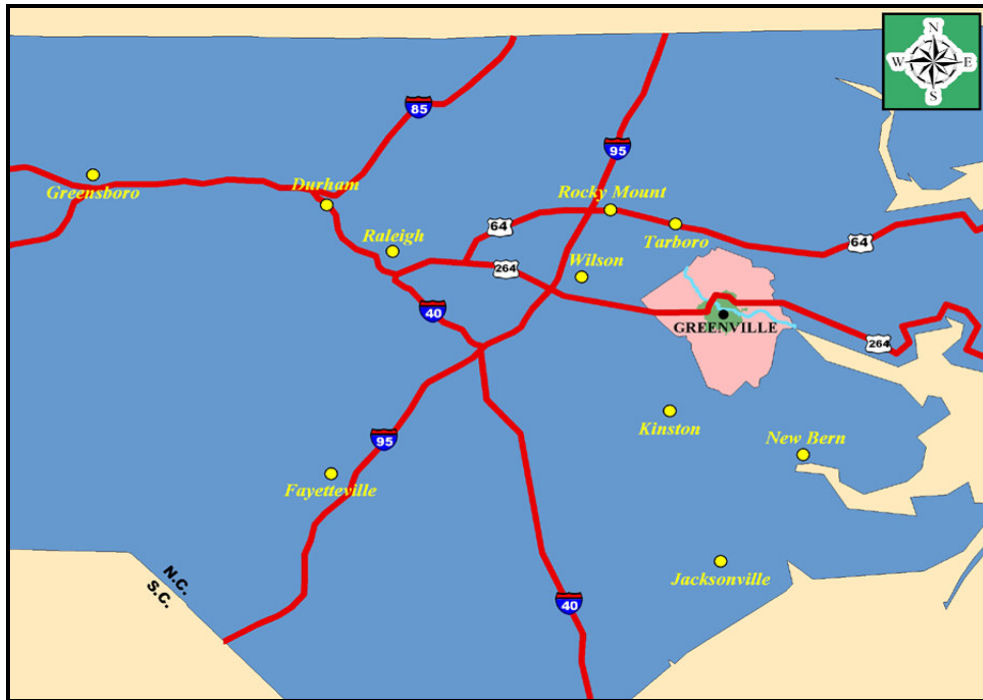
Land use	Acres	Square miles	Percent of total area
Cemetery	181	0.3	0.46%
Commercial	1,868	2.9	4.75%
Duplex	433	0.7	1.10%
Industrial	1,923	3.0	4.89%
Institutional	1,728	2.7	4.40%
Landfill	171	0.3	0.44%
Mobile Home	349	0.5	0.89%
Mobile Home Park	424	0.7	1.08%
Multi-Family	1,852	2.9	4.71%
Office	624	1.0	1.59%
Public Parking	19	0.0	0.05%
Recreation	1,533	2.4	3.90%
Single Family	6,384	10.0	16.23%
Utility	505	0.8	1.28%
Vacant	21,329	33.3	54.24%
Totals	39,323	61.4	100.00%



Maps 1 and 2 on the next page illustrate the location of Greenville and its surroundings in the eastern part of the state, and the natural resources map of the city. Greenville is not a coastal city, so therefore is not subject to as many natural limitations, but because it is so flat and has a significant amount of wetlands, Greenville has key natural features that should be addressed using this plan, and identified as areas for quality planning and hazard mitigation.

Map 1:

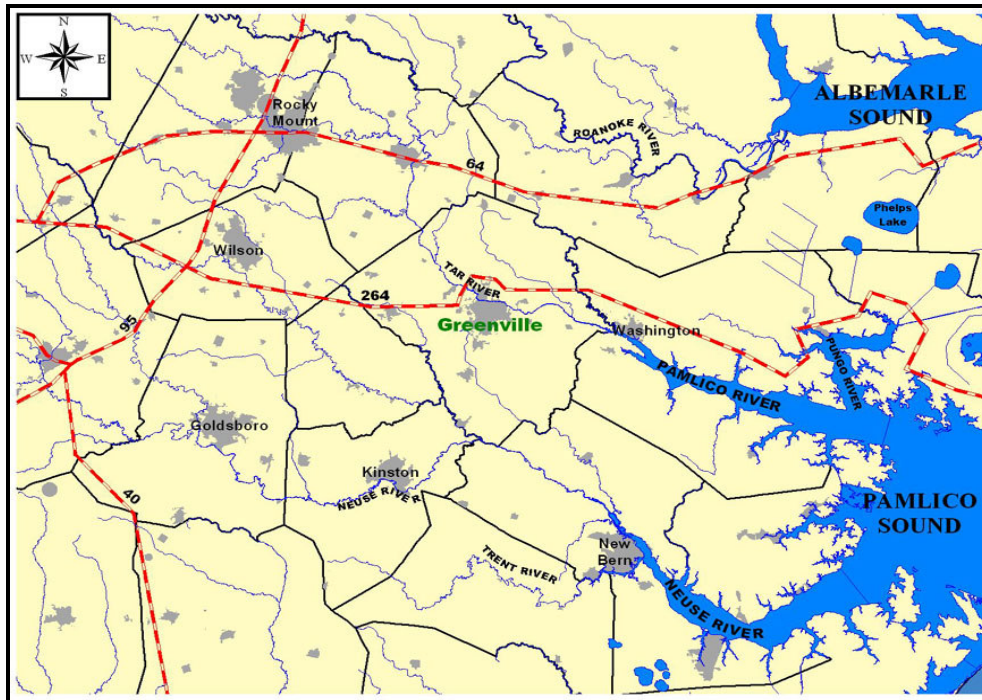
Location Map: This map indicates the primary location of Greenville’s jurisdiction within the boundaries of Pitt County





Map 2:

Natural Areas Map: This map illustrates the rivers and natural features associated with Greenville



B. CITY STAFF, BOARDS & ORGANIZATIONAL CAPABILITIES

The City of Greenville operates under the City Council-City Manager form of government. Six (6) City Council members are elected based on five (5) voting districts, and one (1) at-large member. The City has over 500 total employees within the following departments:

- | | | |
|-------------------------------|-------------------------------|------------------------------|
| <i>City Attorney's Office</i> | <i>City Clerk's Office</i> | <i>City Manager's Office</i> |
| <i>Financial Services</i> | <i>Fire-Rescue</i> | |
| <i>Human Resources</i> | <i>Information Technology</i> | <i>Comm. Development</i> |
| <i>Public Works</i> | <i>Recreation & Parks</i> | <i>Police</i> |

Greenville also has several boards and commissions that serve in an advisory capacity to the City Council. All boards and commissions consist of volunteers who are appointed by the City Council to serve specific terms. The following is a listing of City boards and commissions:

- | | |
|---|--|
| <i>Affordable Housing Loan Committee</i> | <i>Board of Adjustment</i> |
| <i>Community Appearance Commission</i> | <i>Environmental Advisory Commission</i> |
| <i>Fireman's Relief Fund Committee</i> | <i>Greenville Utilities Commission</i> |
| <i>Historic Preservation Commission</i> | <i>Housing Authority</i> |
| <i>Human Relations Council</i> | <i>Pitt-Greenville Airport Authority</i> |
| <i>Pitt-Greenville Conv. & Visitors Authority</i> | <i>Planning & Zoning Commission</i> |
| <i>Police Community Relations Committee</i> | <i>Public Transit & Parking Commission</i> |
| <i>Neighborhood Advisory Board</i> | <i>Redevelopment Commission</i> |



C. GREENVILLE’S ECONOMIC & INSTITUTIONAL CAPABILITIES

Greenville Utilities Commission provides the primary water, sewer, gas and electric services for the City of Greenville as well as a few other municipalities of Pitt County. Greenville is considered a primary industrial, educational and medical economic engine within Eastern North Carolina. Some of the Greenville’s major employers include East Carolina University, Pitt County Memorial Hospital, Pitt Community College, DSM Pharmaceuticals, NACCO Materials Handling Group, Alliance One International, Overton’s Sports Center, Inc., Physicians East, and Trade Oil Company.

East Carolina University (ECU) is the primary institution of higher learning within Greenville’s city limits. ECU contains over 27,000 students annually, and offers about 100 undergraduate degree programs, 76 masters degree programs, and 21 doctorate degree programs. ECU is most known for its School of Medicine. It is a member of the 16-campus University of North Carolina System. The other institution is Pitt Community College located partly in Greenville, which awards associate degrees, diplomas and certificates for 56 programs. Enrollment averages about 5,000 students per semester. The Pitt County Schools System consists of 35 schools, including two high schools within Greenville’s city limits (J.H. Rose High School, and South Central High School). The system serves 23,235 students and employs over 1,600 teachers.

Greenville also contains several commerce, tourism and industrial development entities based within the city limits, including the Convention and Visitors Bureau, the West Greenville Community Development Corporation, the Pitt-Greenville Chamber of Commerce, Uptown Greenville, Inc., and the Greenville Convention Center.

(Source: 2004-Living in Pitt County Book of Facts, “The Daily Reflector”, Sunday May 22, 2004, Pitt County Development Commission, 2010).

D. LEGAL & FISCAL CAPABILITIES

As a general rule, local governments have only that legal authority which is granted to them by their home state. This principle, that all power is vested in the State and can only be exercised to the extent it is delegated, is known as "Dillon's Rule," and applies to all North Carolina's political subdivisions. Enabling legislation in North Carolina grants a wide array of powers to its cities, towns, and counties.

Local regulations, which are enacted within the bounds of the state's enabling authority, do not automatically meet with judicial acceptance. Any restrictions that local governments impose on land use or building practices must follow the procedural requirements of the Fourteenth Amendment, or risk invalidation.

These and other constitutional mandates apply to federal and state governments, and all their political subdivisions such as the City of Greenville. Any mitigation measures that are undertaken by Greenville in its regulatory capacity must be worded and enforced carefully within the parameters established by the state and federal Constitutions, even when such measures are authorized by the General Statutes of North Carolina, and even when such measures are enacted in order to protect public health and safety by protecting the community from the impacts of natural hazards.



Within the limits of Dillon's Rule and the federal and state Constitutions, Greenville has a wide latitude within which to institute mitigation programs, policies, and actions. Greenville's powers fall into one of four basic groups (although some governmental activities may be classified as more than one type of power): regulations & policies, acquisition of property, taxation, and spending. Hazard mitigation measures can be carried out under each of the four types of powers. Following are a list of these powers and how they may be useful tools for hazard mitigation:

❖ **REGULATIONS**

◆ **General Police Power**

Greenville has been granted broad regulatory powers based on the North Carolina General Statutes, allowing the City to enact and enforce ordinances, which define, prohibit, regulate, or abate acts, omissions, or conditions detrimental to the health, safety, and welfare of the people, and to define and abate nuisances (including public health nuisances). Since hazard mitigation can be included under the police power (as protection of public health, safety, and welfare), towns, cities, and counties may include requirements for hazard mitigation in local ordinances. Greenville uses its ordinance-making power to abate "nuisances," which could include, by local definition, any activity or condition making people or property more vulnerable to any hazard.

◆ **Building Codes and Building Inspections**

Many structural mitigation measures involve constructing and retrofitting homes, businesses, and other structures according to standards designed to make the buildings more resilient to the impacts of natural hazards. Many of these standards are imposed through The City of Greenville's Building Code. North Carolina has a state compulsory building code, which applies throughout the state (N.C.G.S. 143-138). However, Greenville has adopted codes for the respective areas if approved by the state as providing "adequate minimum standards." However, these regulations cannot be less restrictive than the state code.

The City of Greenville is also empowered to carry out building inspections. N.C.G.S. Ch. 160A, Art. 19, Part 5; and Ch. 153A, Art. 18, Part 4 "empower cities and counties to create an inspection department, and enumerates its duties and responsibilities, which include enforcing state and local laws relating to the construction."

◆ **Land Use, Zoning & Floodplain Regulation**

Through various land use regulatory powers, the City of Greenville controls the amount, timing, density, quality, and location of new development; all these characteristics of growth can determine the level of vulnerability to Greenville in the event of a natural hazard. Land use regulatory powers include the power to engage in planning, enact and enforce zoning ordinances, floodplain ordinances, and subdivision controls.



Zoning is the most traditional and ubiquitous tool that Greenville uses to control the use of land. Broad enabling authority for Greenville to engage in zoning is granted in N.C.G.S. 160A-381. The statutory purpose for the grant of power is to promote health, safety, morals, or the general welfare of the community. Land "uses" controlled by zoning include the type of use (e.g., residential, commercial, industrial) as well as minimum specifications for use such as lot size, building height and setbacks, density of population, and the like. Greenville is authorized to divide its territorial jurisdiction into zoning districts, and to regulate and restrict the erection, construction, reconstruction, alteration, repair or use of buildings, structures, or land within those districts. Districts may include general use districts, overlay districts, and special use districts or conditional use districts. The City of Greenville's Zoning Ordinance is located in Title IX of the City Code, and consists of maps and written text.

The North Carolina General Statutes declare that the channel and a portion of the floodplain of all the state's streams will be designated as a floodway, either by the local government or by the state. The legislatively declared purpose of designating these areas as a floodway is to help control and minimize the extent of floods by preventing obstructions which inhibit water flow and increase flood height and damage and other losses (both public and private) in flood hazard areas, and to promote the public health, safety, and welfare of citizens of Greenville in flood hazard areas. To carry out this purpose, The City of Greenville has established a Flood Damage and Prevention Ordinance, which is Title IX, Chapter 6 of the Greenville City Code. The City is empowered to grant permits for the use of the floodways, including the placement of any artificial obstruction in the floodway, however the development of land within the floodway, or the 100-year floodplain as identified by FEMA is restricted in accordance with State law. No permit is required for certain uses, including agricultural, wildlife and related uses; ground level uses such as parking areas, rotary aircraft ports; lawns, gardens, golf courses, tennis courts, parks, open space, and similar private and public recreational uses. The procedures that are laid out for issuing permits for floodway and 100-year floodplain use require the City of Greenville to consider the dangerous effects a proposed artificial obstruction may create by causing water to be backed up or diverted; or the danger that the obstruction will be swept downstream to the injury of others; and by the injury or damage that may occur at the site of the obstruction itself. The Flood Damage and Prevention Ordinance takes into account anticipated development in the foreseeable future, which may be adversely affected by the obstruction, as well as existing development.

The importance of the planning powers of Greenville is emphasized in N.C.G.S. 160A-383. While the ordinances themselves may provide evidence that zoning and floodplain development are being conducted "in accordance with a plan," the existence of a separate planning document ensures that the City is developing regulations and ordinances that are consistent with the overall goals of the community. The City of Greenville's Comprehensive Plan is known as Horizons, which serves as Greenville's guide for future development considerations. The goals, objectives and strategies of Greenville's Horizons plan will be discussed in greater detail later in the plan as they relate to hazard mitigation strategies more specifically. The City of Greenville is currently undergoing its five-year review of the comprehensive plan.



Subdivision regulations control the division of land into parcels for the purpose of building development or sale. Flood-related subdivision controls typically require that subdividers install adequate drainage facilities, and design water and sewer systems to minimize flood damage and contamination. They prohibit the subdivision of land subject to flooding unless flood hazards are overcome through filling or other measures and prohibit filling of floodway areas. They require that subdivision plans be approved prior to the sale of land. Subdivision regulations are a more limited tool than zoning and only indirectly affect the type of use made of land or minimum specifications for structures. Broad subdivision control enabling authority for Greenville is granted in N.C.G.S. 160-371. Subdivision is defined as all divisions of a tract or parcel of land into two or more lots and all divisions involving a new street (N.C.G.S. 160A-376). The definition of subdivision does not include the division of land into parcels greater than 10 acres where no street right-of-way dedication is involved.

❖ ***ACQUISITION OF PROPERTY***

The power of acquisition can be a useful tool for pursuing mitigation goals. The City of Greenville may find the most effective method for completely "hazard-proofing" a particular piece of property or area is to acquire the property (either in fee or a lesser interest, such as an easement), thus removing the property from the private market and eliminating or reducing the possibility of inappropriate development occurring. North Carolina legislation empowers cities, towns, and counties to acquire property for public purpose by gift, grant, devise, bequest, exchange, purchase, lease, or eminent domain.

❖ ***TAXATION***

Taxation is yet another power granted to the City of Greenville by North Carolina law which can be used as a hazard mitigation tool. Greenville currently has annual property tax revenue of \$3.4 million. However, the power of taxation extends beyond merely the collection of revenue. Greenville has a set preferential tax rate for areas, which are unsuitable for development (e.g., agricultural land, wetlands) and can be used to discourage development in hazardous areas.

Greenville also has the authority to levy special assessments on property owners for all or part of the costs of acquiring, constructing, reconstructing, extending, or otherwise building or improving beach erosion control or flood and hurricane protection works within a designated area. This can serve to increase the cost of building in such areas, thereby discouraging development.

Because the usual methods of apportionment seem mechanical and arbitrary, and because the tax burden on a particular piece of property is often quite large, the major constraint in using special assessments is political. Special assessments seem to offer little in terms of control over land use in developing areas. They can, however, be used to finance the provision of services the City deems necessary within its boundaries. In addition, they are useful in distributing to the new property owners the costs of the infrastructure required by new development.



❖ **SPENDING**

Spending is the power Greenville is given to make expenditures in the public interest. Hazard mitigation principles should be made a routine part of all spending decisions made by the local government, including annual budgets and Capital Improvement Plans.

A capital program is usually a timetable by which a city indicates the timing and level of municipal services it intends to provide over a specified duration. Capital programming, by itself, can be used as a growth management technique, with a view to hazard mitigation. By tentatively committing itself to a timetable for the provision of capital to extend municipal services, a community can control its growth to some extent especially where the surrounding area is such that the provision of on-site sewage disposal and water supply are unusually expensive.

In addition to formulating a timetable for the provision of services, a local community can regulate the extension of and access to municipal services.

The City of Greenville has an active Capital Improvement Program (CIP) that is coordinated with extension and access policies, and can provide a significant degree of control over the location and timing of growth. These tools can also influence the cost of growth. If the CIP is effective in directing growth away from environmentally sensitive or high hazard areas, for example, it can reduce environmental costs.

❖ **FISCAL CAPABILITY**

There are many diverse sources of funding available to communities to implement local hazard mitigation plans, including both government and private programs. Often an organization with a particular focus will fund only part of a project. However, with coordination, the community can combine the funding efforts of one program with those of another, thereby serving multiple missions. The grant and loan programs described in the following two pages of this plan are a significant, although certainly not a sole source of funding options.

While federal and national programs carry out the bulk of disaster relief programs that provide funds for mitigation, local governments are encouraged to open the search field as widely as possible, and include alternative funding sources to supplement the local hazard mitigation budget. For instance, Greenville businesses and organizations will frequently support projects that benefit their customers or employees, or which constitute good "PR." Other groups or individuals may be willing to donate "in-kind" services, eliminating the need for cash. Often the in-kind and volunteer services of local community members can be counted toward the local share that is typically needed to match an outside source of funds.

Greenville may also engage in its own "fund-raising" efforts to pay for mitigation programs that benefit the community at large. In North Carolina, local governments are granted limited powers to raise revenue for public purpose. The General Assembly has given the City of Greenville the power to levy property taxes for various purposes, including: "ambulance services, rescue squads, and other emergency medical services; civil defense; drainage projects



or programs; fire protection; hospitals; joint undertakings with other county, city, or political subdivisions; planning; sewage; solid waste; water; water resources; watershed improvement projects" N.C.G.S. §16A-209. These statutorily enumerated purposes make it clear that Greenville is empowered to finance certain emergency management activities, including mitigation activities, with property taxes.

The following is a list and description of several programs, which offer funding for hazard mitigation, redevelopment, and post disaster recovery:

◆ **Hazard Mitigation Grant Program**

The Federal Disaster Assistance Act (Stafford Act) provides funds authorized by the federal government and made available by FEMA for a cost-share program to states. The HMGP provides 75% of the funds while the states provide 25% of the funds for mitigation measures through the post-disaster planning process. The Division of Emergency Management administers the program in this state. The state share may be met with cash or in-kind services. The program is available only for areas affected by a Presidentially-declared disaster. The City of Greenville specifically used HMGP funds to buy-out the majority of severely flooded properties after Hurricane Floyd under the circumstances that residential units were located within the 100-year floodplain, the properties were occupied by either the owner, a tenant, or were available for sale or rent at the time of the flood, or the property was damaged to at least 50 percent of its fair market value or declared to be environmentally uninhabitable. The City's HMGP process was administered by City Planners in the Flood Recovery Center. The City purchased a total of about 491 properties using \$27.8 million dollars of federal grant money in buy-out and demolition expenses. The first phase of the City's HMGP application after Floyd was approved on December 15, 1999. Based on this program the City created its Flood Land Reuse Plan, which generates a lease system for use and maintenance of these properties based on certain restrictions placed on them by FEMA. The Flood Land Reuse Plan sets forth significant policies in the way of hazard mitigation, and will be discussed later in this plan.

◆ **Disaster Preparedness Improvement Grant (DPIG)**

This grant provides federal matching funds for communities to develop hazard mitigation plans, expand existing plans, update disaster preparation plans, and to prepare the administrative plans required to qualify for Hazard Mitigation Grant Program grants. Funds for the DPIG are provided by FEMA and the Division of Emergency Management administers the program in each state. The City of Greenville specifically has no record of using these funds. However it is important to note that Greenville could have this option if the plan needed to be updated and there was a shortage of staff to complete the assignment.

◆ **Flood Mitigation Assistance Program (FMAP)**

This program provides grants for cost-effective measures to reduce or eliminate the long-term risk of flood damage to the built environment and real property. The program's main goal is to reduce repetitive losses to the National Flood Insurance Program. The FMAP is available to eligible communities every year, not just after a Presidentially-declared disaster.



Funds for the FMAP are provided by FEMA and the Division of Emergency Management administers the program in each state. These funds were not specifically used by the City of Greenville after Hurricane Floyd, but it is important to note their significance.

◆ **Public Assistance Program (PA)**

The Public Assistance provides federal aid to communities to help save lives and property in the immediate aftermath of a disaster and to help rebuild damaged facilities. Grants cover eligible costs associated with the repair, replacement, and restoration of facilities owned by state and local governments and nonprofit organizations. The Public Assistance program is administered by FEMA.

◆ **Small Business Administration Disaster Assistance Program**

This program provides loans to businesses affected by Presidentially-declared disasters. The program provides direct loans to businesses to repair or replace uninsured disaster damages to property owned by the business, including real estate, machinery and equipment, inventory and supplies. Businesses of any size are eligible. Nonprofit organizations are also eligible. The SBA administers the Disaster Assistance Program. In the City of Greenville, the SBA Loan program was administered by East Carolina University, which also had a Flood Recovery Center set up at their Willis Building. The City's Relocation Specialist served as a referral source for these loans for businesses that needed assistance.

◆ **Housing Crisis Assistance Funds**

Under The Hurricane Floyd Recovery Act of 1999 created under the North Carolina Department of Commerce, Greenville applied for infrastructure grant funds to service two (2) single-family subdivisions for home-owners and tenants affected by the storm. The first of which, known as Countryside Estates, contains 105 lots. The other is known as Meadowbrook estates containing 85 lots, which was constructed by a private developer. The Flood Recovery Center administered this grant. Overall, \$1.9 million dollars in infrastructure grants were utilized for the development of these homes. The City of Greenville Community Development Department continues to maintain and keep records of the homes being sold in these subdivisions.

◆ **Community Development Block Grant (CDBG)**

The United States' Housing and Urban Development (HUD) Community Development Block Grant (CDBG) program provides grants to entitlement communities (metropolitan cities and urban counties), and the State of North Carolina for post-disaster hazard mitigation and recovery following a presidential declaration of a Major Disaster of Emergency. Funds can be used for activities such as acquisition, rehabilitation, or reconstruction of damaged properties and facilities and redevelopment of disaster-affected areas. Funds may also be used for emergency response activities, such as debris clearance and demolition and extraordinary increases in the level of necessary public services. The City of Greenville is considered an entitlement community and has an active Home



Consortium Plan and CDBG Program. CDBG funds were utilized to administer the Repair and Replacement program which assisted home-owners located within the 500-year floodplain that were severely affected by Hurricane Floyd. Planners in the Flood Recovery Center administered the Repair and Replacement grant, and maintained files on the use of these funds.

E. TECHNOLOGICAL CAPABILITIES

As mentioned in the staff capability section, Greenville has full-time employees that work in the Information Technology (IT) Department. The IT Department contains four divisions: The Development Division, the Systems Analysis Division, the Support Division, and the Geographic Information Services (GIS) Division. Through IT, the City of Greenville has full internet capabilities, and the ability to use Microsoft Office products through a Hummingbird DOCS System for security. An AS 400 HTE system is used for payroll records, accounting and financial services. The Planning and Community Development Department does not use the AS 400 system for any other reasons except payroll. The primary email client is Outlook Express, and Greenville has full GIS capabilities through ArcGIS 9.1, which includes Arc Map, Arc Toolbox and Arc Catalog. The Department of Planning and Community Development contains a Planner II – GIS Specialist that maintains and creates data layers for use primarily by the Planning Department, but also for other departments such as Public Works.

The Community Development Department is divided into four primary divisions including Planning, Urban Development, Housing and the Administrative Division. This Hazard Mitigation Plan is being written, administered, and maintained by the Planning division. Other long-range plans include Horizons: Greenville’s Comprehensive Plan, the 2004 Greenway Master Plan, the Flood Land Reuse Plan, and the 2006 Center City – West Greenville Revitalization Plan, .

Changes to this plan and comments on other arrangements as they relate to this plan will be reviewed by some of the commissioned bodies as previously mentioned, including the Environmental Advisory Commission, Planning and Zoning Commission, and the City Council.



F. POLITICAL CAPABILITIES

Within the Department of Development, the City has written documents and plans that outline many policies and objectives the City will follow in instances of environmental protection and quality. The City's Environmental Advisory Commission operates in this capacity by making recommendations to City Council. Flood protection in general has become a major political issue since the citizens of Greenville have seen first-hand the impact of major natural disasters. Greenville advances hazard mitigation through plans and ordinances more than by any other method. Greenville's Horizons plan gives detailed political descriptions of the importance of preserving flood hazard areas, and increasing awareness to citizens on the effects of a major flood. The Flood Land Reuse Plan serves as another political guidance tool that displays facts about what was lost, and explains that future uses should have a low flood damage potential. As indicated in the mitigation strategies outlined in the 2004 version of this plan, the City of Greenville has made efforts to increase its political capabilities by establishing small area plans that promote long range environmental planning goals, and by increasing awareness to the public. Since 2004, the City has completed six (6) neighborhood or small area plans. The City also works with other agencies, as mentioned throughout this plan, such as East Carolina University in order to establish a good political climate.

END OF SECTION



**HAZARD IDENTIFICATION
& VULNERABILITY**

A. POTENTIAL HAZARDS

North Carolina is faced with many risks from different sources of natural disasters. Some areas may have different impacts and vulnerability to certain hazard events whereas others may not. Due to its unique geographical setting, The City of Greenville is vulnerable to a wide array of natural disasters that threaten life and property. Prior to determining which specific hazards the City of Greenville should focus on, Greenville needs to know the type of natural hazards that threaten the City, the likelihood of occurrence of the hazards, the impact of the hazard, and the strength of the hazard. These hazards include:

- ❖ *FLOODING*
- ❖ *HURRICANES & TROPICAL STORMS*
- ❖ *TORNADOES*
- ❖ *SEVERE THUNDERSTORMS*
- ❖ *SEVERE WINTER STORMS*
- ❖ *NOR'EASTERS*
- ❖ *WILDFIRES*
- ❖ *EARTHQUAKES*

Greenville’s vulnerability to these hazards is similar to Pitt, Hyde, Beaufort, Jones, Lenoir, Johnston, Greene, Craven, Carteret, Pamlico and Wayne Counties, including their municipalities because they are located within climate division 7 identified by the National Climatic Data Center for the State of North Carolina.

Map 3:
Climate Divisions of North Carolina



Source: Division of Emergency Management (www.dem.dcc.state.nc.us/mitigation/local_hazards.htm)



Some of these hazards are interrelated (i.e., hurricanes can cause flooding and tornadoes), and some consist of hazardous elements that are not listed separately (i.e., severe thunderstorms can cause lightning and nor'easters can cause coastal erosion). Pitt County and the City of Greenville are more vulnerable to hurricanes, nor'easters, flooding, thunderstorms, and tornadoes than to earthquakes, severe winter storms and wildfires, although these will all be addressed by this plan. Dam/Levee Failures, Drought/Heat Waves, and Landslides are disasters that are identified by FEMA that have no historical impact in the City of Greenville or Pitt County. This plan will not discuss tsunamis or volcanoes due to their low-likelihood of occurrence, and it is not intended to address man-made disaster risks such as chemical spills, civil disorder, terrorism, and the like. The reader is encouraged to refer to the City of Greenville Police Department's Emergency Operations Manual for information regarding responses to man-made disaster events.

❖ **FLOODING**

◆ **Description**

Flooding is the most frequent and costly natural disaster in the United States. Floods are generally the result of excessive precipitation, and can be classified under the following categories:

Flash flooding events usually occur within minutes or hours of heavy amounts of rainfall, from a dam or levee failure, or from a sudden release of water held by an ice jam. Most flash floods are caused by slow-moving thunderstorms or heavy rains associated with a hurricane or tropical storm. Although flash flooding occurs more frequently around mountain streams, it is also common in an urbanized area where impervious surface cover covers the ground for the most part. Nationally, July is the month in which most flash floods occur, and nearly 90% of flash floods occur during the April through September period.

General floods are usually longer-term events that may last for several days over a given river basin. The severity of a flooding event is determined by a combination of stream and river basin topography and physiography, precipitation and weather patterns, recent soil moisture conditions and the degree of vegetative clearing.

Riverine flooding is a function of excessive precipitation levels and water runoff volumes within the watershed or basin of a stream or river.

Coastal flooding is typically a result of storm surge, wind-driven waves, and heavy rainfall produced by hurricanes, tropical storms, nor'easters and other large coastal storms.

Urban flooding occurs where man-made developments obstruct the natural flow of water and/or decrease the ability of natural ground cover to absorb and retain surface water runoff. This is partly the result of the use of waterways for transportation purposes provided as a source of convenience to ship and receive commodities.

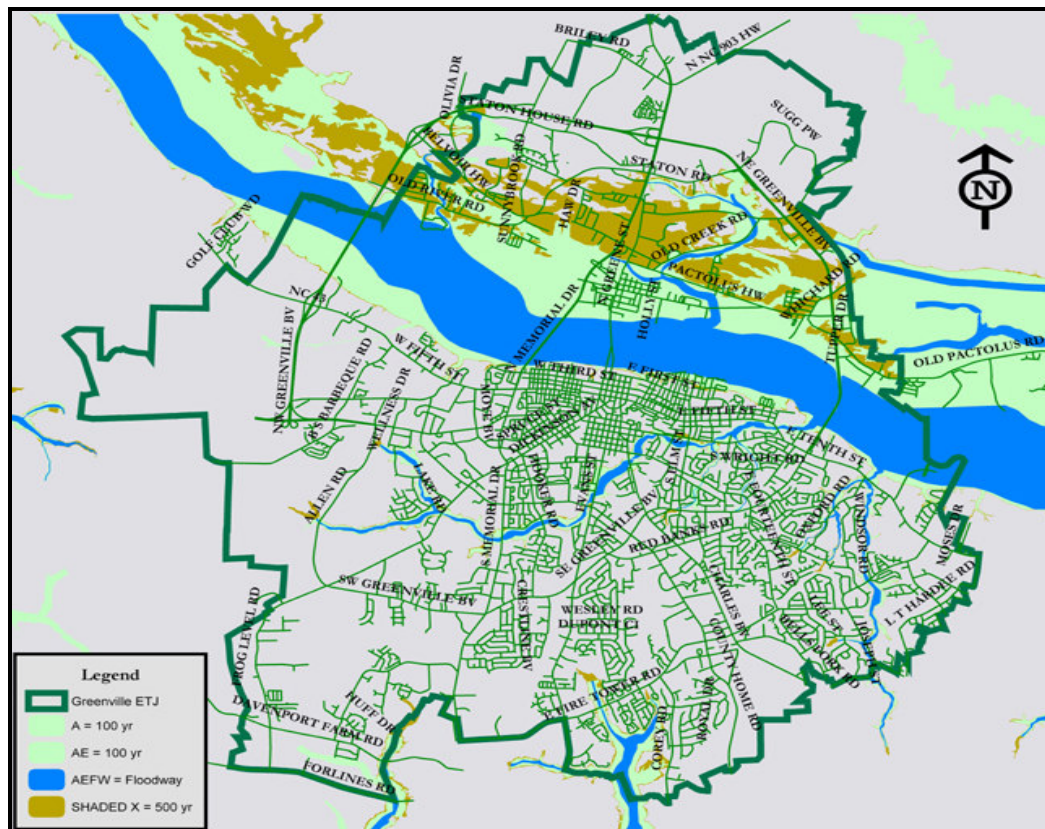
Periodic flooding of lands adjacent to rivers, streams and shorelines is a natural occurrence that can take place based upon established recurrence intervals. The recurrence interval of a

flood is defined as the average time interval (years) expected between a flood event of a particular magnitude and an equal or larger flood. Flood magnitude increases with increasing recurrence intervals.

A “floodplain” is the lowland area adjacent to a lake, river, stream or ocean. Floodplains are identified by the frequency of a flood event that is large enough to cover them. For example, the 100-year floodplain will most likely be completely flooded at the occurrence of a 100-year flood. The 100-year flood frequency is determined by plotting a graph of the size of all known floods for an area, and determining how often floods of a particular size will occur. Another way of expressing the flood frequency is to determine the probability within a given year. For example, the 100-year flood has a 1% chance of occurring in a given year. Most floodplains have three main zones including the floodway, which is basically the stream ditch or extent of the channel, the 100-year floodplain, and 500-year floodplains. In some cases, the 100-year floodplain as classified by FEMA has a category A and AE. Category A is an area that may experience the 100-year flood, but does not have specific reference data on elevations. The 500-year floodplain is most often known as zone X.

Map 4:

Floodplain Map: This map indicates the location of the City of Greenville’s floodplain



The severity of a flooding event is usually determined by a combination of river basin physiography, local thunderstorm movement, past soil moisture conditions, and the degree



of vegetative clearing. Abnormal weather patterns may also contribute to flooding of local areas. Large-scale climatic events such as the El-Nino-Southern Oscillation in the Pacific Ocean have been linked to increased storm activity and flooding in the United States.

◆ **Likelihood of Occurrence**

Flood Hazards vary by location and type of flooding. Inland areas are most at risk to flash floods caused by intense rainfall over short periods of time. Urban areas are particularly susceptible to flash floods. Large amounts of impervious surfaces increase runoff amounts and decrease lag time between the onset of rainfall and stream flooding. Man-made channels may also constrict stream flow and increase flow velocities.

The dominant sources of flooding in Greenville are riverine flooding from the Tar River, located within the Tar-Pamlico River Basin, and its tributaries mainly Green Mill Run, and Hardee Creek/Bells Branch. Greenville also suffers from urban storm water related flooding as impervious surface is increased. The entire City is relatively flat with most ground elevations at or below 25 feet above sea level.

◆ **Historical Impact and Occurrences**

The floodplain areas as depicted on Map 2 are the historical focus of most flooding within the City of Greenville. 500-year floodplain areas have also suffered from flooding. Floodplain areas north of the Tar River have suffered from more severe flooding historically, while floodplain areas to the south have suffered more frequently but less severe. Severe thunderstorms and Nor'easters over the years have distributed large amounts of rainfall, but Tropical Storms and Hurricanes that bring high winds and large amounts of precipitation have the greatest probability to cause flooding.

Flash Flood/Tropical Storm Josephine (October 8, 1996) – The remnants of Tropical Storm Josephine dumped as much as six inches of rain on Eastern North Carolina. Reportedly, Greenville suffered very little from these flash floods, but did record numbers for some property damages.

Tropical Storm Dennis/Hurricane Floyd (August through September, 1999) – The City of Greenville and Eastern North Carolina suffered from the worst flooding in recorded history as a result of the combination of Tropical Storm Dennis and Hurricane Floyd. On August 30, 1999, Hurricane Dennis approached North Carolina as a category 2 hurricane, but quickly down graded to a tropical storm. This first wave of Tropical Storm Dennis left little impact on the City of Greenville specifically, but did produce lots of rain that raised the elevations of the Tar River and its tributaries. On September 4, 1999, Tropical Storm Dennis returned to Eastern North Carolina dumping very heavy rains. With the ground unable to absorb any more rainfall, Hurricane Floyd swept through the area on September 15, 1999 and dumped as much as twenty inches of precipitation in some areas of Greenville. Due to the fact that the Tar River and its tributaries were already swollen to their limits, the floodwaters engulfed almost all of the area within the 100 and 500-year floodplains. The flood impacted approximately 1,893 total structures (see table 4). Many of the affected structures within Greenville's jurisdiction remained submerged for nearly two weeks. Of



these structures, approximately 55% were deemed uninhabitable and 45% in need of repair. Monetary losses for the City of Greenville and its residents are estimated as follows: \$23.5 million dollars in damages to city-owned properties, \$65.5 million dollars to private residential and commercial properties, and over \$2.5 million dollars in personal property damages.

Table 4:
Classification of Damaged Structures

<u>STRUCTURE TYPE</u>	<u>TOTAL</u>	<u>% OF TOTAL</u>
Single-Family Detached	404	21.3%
Manufactured Homes	642	33.9%
Multi-Family Units	501	26.4%
Duplex Units	206	10.9%
Commercial Structures	140	7.5%
Total Structures	1,893	100%

Image 1:
Flooded View of Highway 264 Bypass



Image 2:
Flooded View of Pinecrest MHP





❖ **HURRICANES & TROPICAL STORMS**

◆ **Description**

Hurricanes are cyclonic storms that originate in tropical ocean waters pole ward of about 50 degrees N. latitude. Basically, hurricanes are heat engines, fueled by the release of latent heat from the condensation of warm water. Their formation requires a low-pressure disturbance, sufficiently warm sea surface temperature, rotational force from the spinning of the Earth, and the absence of wind shear in the lowest 50,000 feet of the atmosphere.

Hurricanes that impact North Carolina form in the so-called Atlantic Basin, from the west coast of Africa westward into the Caribbean Sea and Gulf of Mexico. Hurricanes in this basin generally form between June 1 and November 30, with a peak around mid-September. As a hurricane develops, barometric pressure at its center falls and winds increase. Winds at or exceeding 39 mph result in the formation of a tropical storm, which is given a name and closely monitored by the NOAA National Hurricane Center in Miami, Florida. When winds are at or exceed 74 mph, the tropical storm is deemed a hurricane.

Because hurricanes derive their strength from warm ocean waters, they are generally subject to deterioration once they make landfall. The forward momentum of a hurricane can vary from just a few miles per hour to up to 40 mph. This forward motion combined with a counterclockwise surface flow makes the right front quadrant of the hurricane the location of the most potentially damaging winds.

Table 5:
Saffir-Simpson Scale

<u>Category</u>	<u>Max. Sustained Wind Speeds (mph)</u>	<u>Min. Surface Pressure (millibars)</u>	<u>Storm Surge (feet)</u>
1	74-95	Greater than 980	3 to 5
2	96-110	979-965	6 to 8
3	111-130	964-945	9 to 12
4	131-155	944-920	13 to 18
5	155+	Less than 920	19+

Hurricane intensity is measured using the Saffir-Simpson Scale (Table 5 above), ranging from 1 (minimal) to 5 (catastrophic). This scale categorizes hurricane intensity linearly based upon maximum sustained winds, minimum barometric pressure and storm surge



potential, which are combined to estimate potential damage. Categories 3, 4 and 5 are classified as “major” hurricanes, and while hurricanes within this range comprise only 20% of total tropical cyclone landfalls, they account for over 70% of the damage in the United States. Table 6 describes the damage that could be expected for each type of hurricane.

Table 6:
Hurricane Damage Classification

<u>Category</u>	<u>Damage Level</u>	<u>Description</u>
1	MINIMAL	No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees. Also, some coastal flooding and minor pier damage
2	MODERATE	Some roofing material, door and window damage. Considerable damage to vegetation, mobile homes, etc. Flooding damages piers and small crafts in unprotected moorings.
3	EXTENSIVE	Some structural damage to small residences and utility buildings, with a minor amount of curtainwall failures. Mobile homes are destroyed. Flooding near the coast destroys smaller structures with larger structures damaged by floating debris. Terrain may be flooded well inland.
4	EXTREME	More extensive curtain wall failures with some complete roof structure failure on small residences. Major erosion of beach areas. Terrain may be flooded well inland.
5	CATASTROPHIC	Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. Flooding causes major damage to lower floors of all structures near the shoreline. Massive evacuation of residential areas may be required

Source: National Hurricane Center

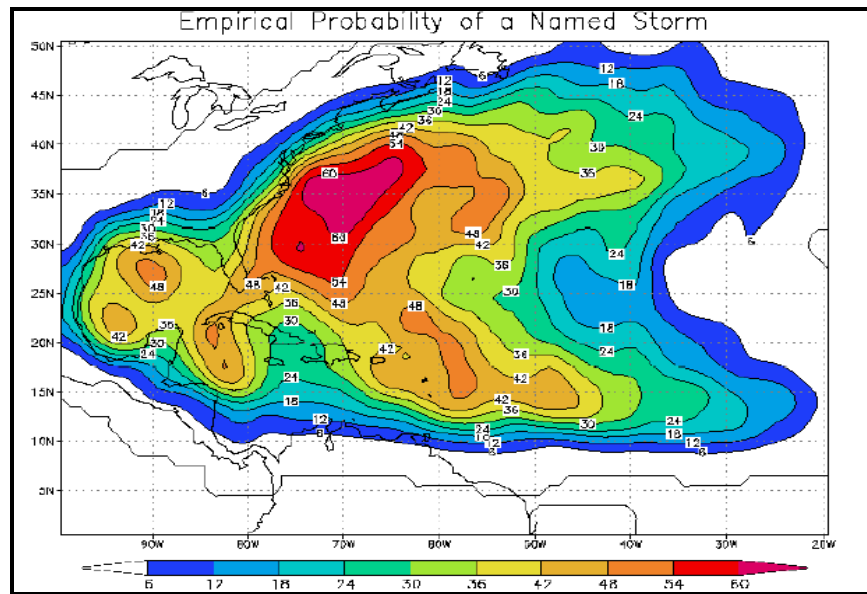
Damage during hurricanes may also result from spawned tornadoes and inland flooding associated with heavy rainfall, which can accompany these storms. Hurricane Floyd for example, as mentioned above will be remembered for causing the worst inland flooding disaster in North Carolina’s history.

◆ **Likelihood of Occurrence**

North Carolina's geographic location on the Atlantic Ocean, and its proximity to the Gulf Stream makes it prone to hurricanes. In fact, North Carolina experienced the fourth greatest number of hurricane landfalls of any state in the twentieth century (trailing Florida, Texas, and Louisiana).

Image 3:

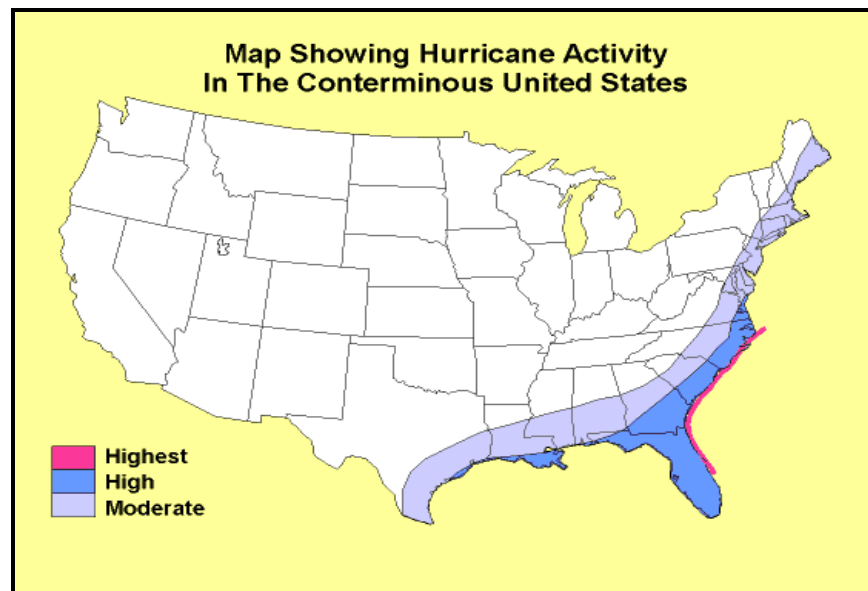
Probability of a Tropical Storm or Hurricane during the season from June to November



Source: NOAA, Hurricane Division: Todd Kimberlain

Based on this chart, Greenville and Pitt County have about a 30 to 36% chance of being affected by a Tropical Storm or Hurricane during the Hurricane Season.

Map 5:
Hurricane Activity Analysis (Source: USGS)



Map 5 from the United States Geological Survey portrays hurricane activity in the United States and as you can see, North Carolina's coastline and inner Coastal Plain areas are most at risk.

◆ **Historical Impact and Occurrences**

North Carolina has a long and notorious history of destruction by hurricanes. Ever since the first expeditions to Roanoke Island in 1586, hurricanes are recorded to have caused tremendous damage to the state. The state's protruding coastline makes it a favorable target for tropical cyclones that curve northward in the western Atlantic Ocean. Reliable classification of the intensity of tropical cyclones began in 1886. When this plan was last updated (2004), the following data was reported:

- There had been 951 tropical cyclones that had been recorded in the Atlantic Ocean and the Gulf of Mexico
- Approximately 166 or 17.5% of those tropical cyclones passed within 300 miles of North Carolina; moreover
- According to the State Climate Office of North Carolina, 38 tropical cyclones had made direct landfall in North Carolina since 1886; of those, 10 were tropical storms, 22 were minor hurricanes and 6 were major hurricanes.
- Another 56 tropical cyclones had impacted North Carolina since 1886 by either entering from another state or by passing in proximity to the coast but remaining offshore; of these, 41 were tropical storms, 8 were minor hurricanes and 7 were major hurricanes.
- According to the State Climate Office, the coast of North Carolina was expected to receive a landfalling tropical cyclone once every four years and be affected by one every 1.3 years.



Between 2004 and 2008, a total of 84 (or 16.8 per year) hurricanes or tropical storms were tracked in the Atlantic/Gulf, with a high of 28 in 2005 and a low of 10 in 2006.

September, 1999 dates the most costly hurricane to ever hit North Carolina, **Hurricane Floyd**. As mentioned in the previous section, Hurricane Floyd made landfall as a Category II storm near Topsail Island and its progression inland resulted in unprecedented, widespread flooding across Eastern North Carolina and Greenville. Damage from Floyd was worse than might have been expected because of **Hurricane & Tropical Storm Dennis**, which had dropped as much as 8 inches of rain on Greenville just 10 days earlier. Rainfall amounts for Floyd were as high as 15 to 20 inches, and rivers across North Carolina rose as much as 23 feet above flood stage, shattering previously established flood records for many locales. Sixty-seven counties sustained damages, and there were a total 52 deaths. In total, the storm damaged more than 55,000 homes, 17,000 of which were left uninhabitable and another 7,000 destroyed. Total damage estimates exceeded 6 billion dollars. At least 13 fatalities were reported for the 15-county warning area that included Pitt County, along with \$413.6 million dollars in crop damage and \$410.6 million dollars in property damage. As mentioned in the previous section, Greenville suffered in property damage losses exceeding \$91 million dollars. The buyout programs began shortly after, once all damaged property was analyzed. Severely damaged properties (damaged 50% or more, located within the 100-year floodplain, or deemed environmentally uninhabitable) were eligible to receive funding through the Hazard Mitigation Grant Program (HMGP). Other funding sources came through the State's Repair and Replacement Program, which gave specific assistance to owner-occupied properties located outside the 100-year floodplain that were affected. On December 15, 1999, the City of Greenville submitted its initial HMGP application to the North Carolina Division of Emergency Management for approval. The City was notified on February 16, 2000 that Phases I and II were approved by the State and the Federal Emergency Management Agency (FEMA). Total expenses for Phases I and II equaled approximately \$9,812,659 for a total of 181 properties. Phase III was originally approved in November of the same year, but has gone through several amendments. The numbers for Phase III payments as of November of 2003 were approximately \$17,995,639.

1996 was another rare year in the hurricane history of North Carolina. Tropical Storm Arthur, Hurricane Bertha, and Hurricane Fran all made direct landfall on the North Carolina coastline. It was the most active tropical cyclone season in the state since 1955, when Hurricanes Connie, Diane, and Ione all hit the coast. **Tropical Storm Arthur** teased the North Carolina coast as a hurricane, and then headed up across Cape Lookout into the Pamlico Sound when it down graded to a tropical depression. Heavy rains fell across Greenville and Pitt County. Reportedly, this region suffered from around 1 million dollars in property damages. **Hurricane Bertha** slammed into the North Carolina coastline between Surf City and North Topsail Beach causing severe damage to property, utilities and roads. Peak wind gusts of 108 mph and a storm surge of 8-10 feet were recorded, and as much as 8 inches of rain fell across the region. Greenville experienced severe winds and rainfall associated with this storm. **Hurricane Fran** was especially destructive. Fran struck the coast as a Category three storm at Cape Fear on September 6, 1996, causing widespread damages and impacting sixty percent of the state. Flash flooding in the mountains, high winds and riverine flooding in the Piedmont and



Coastal Plain, and a coastal storm surge of up to 12 feet took a heavy toll on residences, businesses and agriculture. The storm was responsible for 24 deaths and damaged more than 40,000 homes. Total damage estimates exceeded 3.2 billion dollars for the entire state. Next came **Tropical Storm Josephine** on October 8th, which affected Greenville mostly from a flash flooding standpoint. Greenville suffered from about 100,000 dollars in property damages as a result of this storm.

1953, 1954, and 1955 was the most active three-year period of tropical cyclones in the state's history. Over that period, six hurricanes made direct landfall in North Carolina. The most powerful hurricane to hit the state made landfall in 1954, **Hurricane Hazel**. It was the only category 4 hurricane to make landfall in North Carolina during the last century, resulting in 95 deaths and 2.8 million dollars in damages.

On August 28, 1998, Hurricane Bonnie approached the coast of North Carolina as a minimal Category 3 hurricane, but quickly weakened to Category 1 storm before making landfall near the Onslow/Pender county line. The storm then continued to move slowly northeast at speeds of 10 mph or less, dumping 7-10 inches of rain across eastern North Carolina. Since much of the region had experienced below normal rainfall during the summer months, the resulting flood was not as damaging as it could have been. Only minor injuries were recorded, along with approximately \$6.4 million in property damage and \$117 million in crop damage.

Hurricane Isabel was the latest storm to significantly affect North Carolina in September of 2003. Hurricane Isabel made landfall off the Core Sound Banks near Drum Inlet, and significantly impacted areas of Carteret County and other Counties along the coast. Greenville was affected by the high winds and rainfall of Hurricane Isabel.

❖ ***TORNADOES***

◆ **Description**

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud extending to the ground. It is most often generated by a thunderstorm (but sometimes result from hurricanes or nor'easters) and produced when cool, dry air intersects and overrides a layer of warm, moist air forcing the warm air to rise rapidly. The damage from a tornado is a result of the high wind velocity and wind-blown debris, although they are commonly accompanied by large hail as well. The most violent tornadoes have rotating winds of 250 miles per hour or more and are capable of causing extreme destruction, including uprooting trees and structures, and turning normally harmless objects into deadly missiles. Most tornadoes are just a few dozen yards wide and touch down only briefly, but highly destructive tornadoes may carve out a path over a mile wide and several miles long. The destruction caused by tornadoes may range from light to inconceivable depending on the intensity, size and duration of the storm. Structures of light construction, such as residential homes are more at risk to impacts.



Table 7:

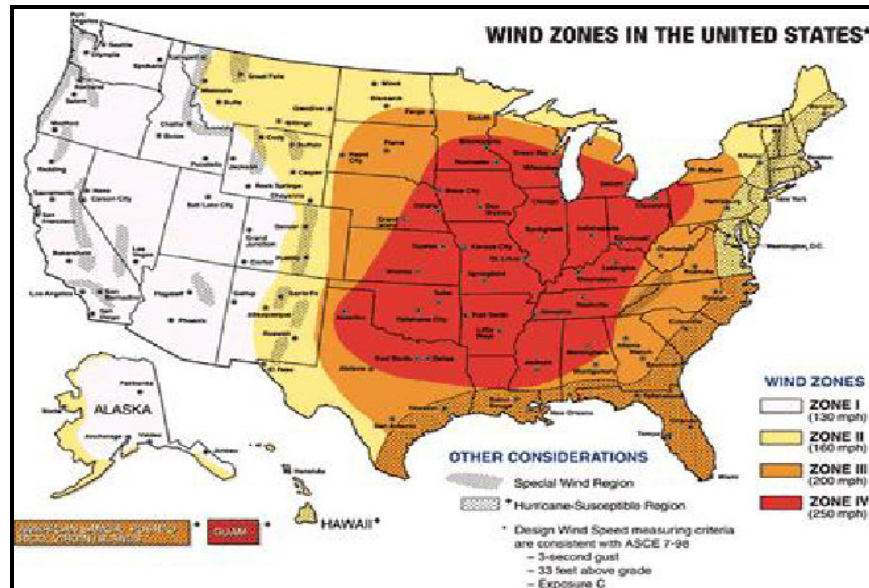
Fujita-Pearson Scale: This scale is used to measure the impact of tornado strength based upon the amount of damage done (*Source: National Climatic Data Center*)

<u>F-Scale</u>	<u>Intensity Phrase</u>	<u>Wind Speed</u>	<u>Damage Description</u>
F0	Gale Tornado	40-72 mph	Some damage to chimneys; breaks branches off trees; pushes over shallow-rooted trees; damages to sign boards
F1	Moderate Tornado	73-112 mph	Lower limit is the beginning of hurricane wind speed; peels surface off roots; mobile homes pushed off foundation; moving autos pushed off roads; attached garages destroyed.
F2	Significant Tornado	113-157 mph	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated
F3	Severe Tornado	158-206 mph	Roof and some walls torn off well-constructed homes; trains overturned; most trees in forest uprooted/destroyed.
F4	Devastating Tornado	207-260 mph	Well-constructed houses leveled; structures w/ weak foundations blown off some distance cars thrown, large missiles generated. Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through the air in excess of 100 meters; trees debarked; steel re-enforced concrete structures badly damaged
F5	Incredible Tornado	261-318 mph	These winds are very unlikely. The small area of damage they might produce would probably not be recognizable. Missiles, such cars and refrigerators would do serious damage that could not be directly identified as F6 damage. If this level is ever achieved, evidence for it might only be found in some manner of ground swirl pattern, for it may never be identifiable through Eng. Studies.
F6	Inconceivable Tornado	319-379 mph	

◆ Likelihood of Occurrence

Although tornadoes have been reported in Greenville throughout the year, most of them have occurred in the spring, with 13% in March, 11% in April, 22% in May, and 14% in June. Each year an average of 800-1000 tornadoes are reported nationwide, and they are more likely to occur during the spring and early summer months of March through June. Tornadoes are mostly likely to form in late afternoons and early evenings.

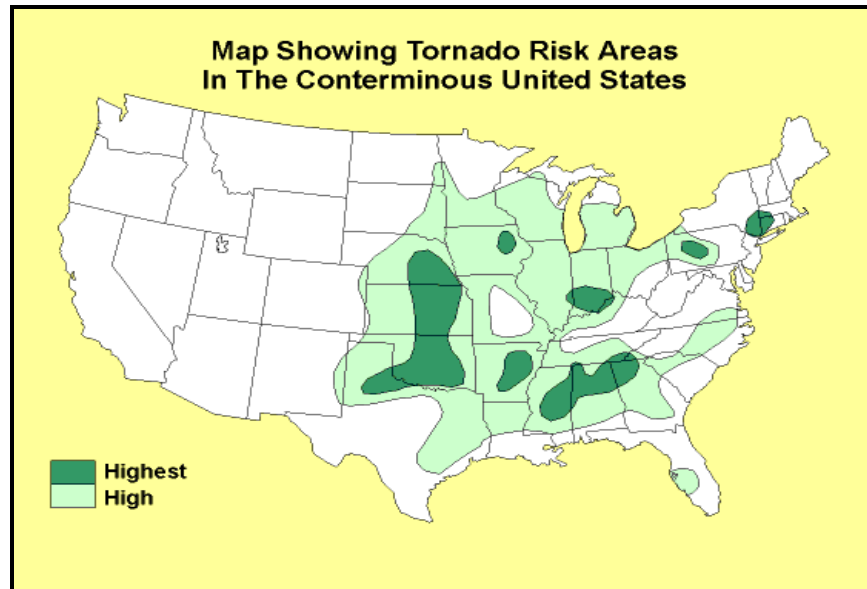
Map 6:
Wind Zones in the United States as identified by FEMA



Source: Federal Emergency Management Agency

Greenville and Pitt County lie within Wind Zone III (see Map 6) as identified by FEMA. Winds within this zone can potentially reach 200 miles per hour. In addition, Zone III includes all of the Coastal Plain of North Carolina, which is also susceptible to Hurricanes and Tropical Storms.

Map 7:
Tornado Risk Assessment in the United States



Source: United States Geological Survey

Map 7 shows the risk of tornado impacts in the United States. As you can see, North Carolina's Piedmont and a portion of the Coastal Plain areas have a high risk for a tornado. Greenville is located just outside this area. Tornadoes have and will occur in Greenville, however, and most of them will be caused by the relationship with other tropical storms. The tornadoes that will most likely affect Greenville normally will not exceed an F1 type storm.

◆ **Historical Impact and Occurrences**

Since the year 1950, 941 confirmed tornadoes were recorded in North Carolina. While many of these were in Pitt County, the vast majority occurred in Western Pitt County. Tornadoic activity generally tends to diminish with increasing proximity to the coast. North Carolina in general ranks 22nd in the nation for frequency of tornadoes, 20th for number of deaths, 17th for injuries, and 21st for cost of damages.

March 28, 1984 marks the date that the largest and most devastating tornado outbreak occurred in North Carolina. This tornado outbreak covered nearly 250 miles across both North and South Carolina and became an F4 classification once it reached Pitt County. The Pitt County tornado touched down just a few miles to the northeast of La Grange and ripped through Lenoir and Greene Counties before reaching Pitt County between 8:45 and 8:55 PM. A total of 9 people in Pitt County lost their lives, 6 of which coming from the east side of Greenville. In addition, this tornado injured about 153 people, and caused over \$16 million dollars in property damages.



CITY OF GREENVILLE – HAZARD MITIGATION PLAN



The following table outlines the tornadoes that have affected Greenville and Pitt County since 1950 with the 1984 storm highlighted:

Table 8:
Tornadoes in Pitt County since 1950

<u>Location</u>	<u>Date</u>	<u>Magnitude</u>	<u>Deaths</u>	<u>Injuries</u>	<u>Property Damage</u>
PITT	5/12/1950	F1	0	0	\$345.8K
PITT	5/31/1950	F1	0	0	\$34.6K
PITT	7/26/1950	F1	0	0	N/A
PITT	4/16/1953	F2	0	0	\$312.2K
PITT	6/11/1955	F2	0	0	\$3.1M
PITT	3/18/1956	F1	0	0	\$30.6K
PITT	6/4/1959	F1	0	0	\$286.4K
PITT	8/31/1964	F1	0	2	\$2.7M
PITT	2/22/1971	F3	0	0	N/A
PITT	5/15/1972	F3	0	4	\$5.0M
PITT	5/29/1973	F0	0	0	187.8K
PITT	2/23/1980	F0	0	0	N/A
<u>Pitt/Greenville</u>	<u>3/28/1984</u>	<u>F4</u>	<u>2</u>	<u>153</u>	<u>\$16.6M</u>
Greenville	4/15/1996	F0	0	0	N/A
Greenville	4/15/1996	F1	0	0	\$26.6K
Farmville	4/11/1999	F0	0	0	N/A
Below data added during 2010 update					
Greenville	9/15/1999	F0	0	0	0
Falkland	10/11/2002	F1	0	0	\$10K
Ayden	7/2/2003	F0	0	0	\$3K
Stokes	11/19/2003	F0	0	0	\$5K
Greenville	6/4/2004	F0	0	0	0
Stokes	6/4/2004	F0	0	0	0
Farmville	6/11/2004	F0	0	0	0
Winterville	8/14/2004	F0	0	0	\$10K
Bethel	5/14/2006	F0	0	0	0
Pactolus	2/18/2008	F1	0	0	\$50K
Farmville	4/12/2008	F0	0	0	0
Farmville Arpt	9/26/2008	F0	0	0	\$2K
Cannon Xrds	3/27/2009	F1	0	0	\$200K
Shelmerdine	5/5/2009	F0	0	0	\$10K

Source: National Climatic Data Center



❖ ***SEVERE THUNDERSTORMS***

◆ **Description**

Severe thunderstorms are defined by the National Weather Service as storms that have wind speeds of 58 miles per hour or higher, produce hail at least three quarters of an inch in diameter, or produces tornadoes. In order to form, thunderstorms simply require moisture to form clouds and rain, coupled with an unstable mass of warm air that can rise rapidly. Thunderstorms affect relatively small areas when compared with hurricanes and winter storms, as the average storm is 15 miles in diameter and lasts an average of 30 minutes. Nearly 1,800 thunderstorms are occurring at any moment around the world, however, of the estimated 100,000 thunderstorms that occur each year in the United States only about 10 percent are classified as severe. Thunderstorms are most likely to happen in the spring and summer months and during the afternoon and evening hours, but can occur year-round and at all hours. Despite their small size, all thunderstorms are dangerous and capable of threatening life and property in localized areas. Every thunderstorm produces lightning, which results from the buildup and discharge of electrical energy between positively and negatively charged areas. Each year, lightning is responsible for an average of 93 deaths (more than tornadoes), 300 injuries, and several hundred million dollars in damage to property and forests. Thunderstorms can also produce large, damaging hail, which causes nearly \$1 billion in damage to property and crops annually. Straight-line winds, which in extreme cases have the potential to exceed 100 miles per hour, are responsible for most thunderstorm wind damage. One type of straight-line wind, the downburst, can cause damage equivalent to a strong tornado and can be extremely dangerous to aviation. Thunderstorms are also capable of producing tornadoes and heavy rain that can lead to flash flooding.

◆ **Likelihood of Occurrence**

Thunderstorms are common throughout North Carolina, and have occurred in all months. Thunderstorm-related deaths and injuries in North Carolina (1959-1992) have peaked during July and August. Thunderstorms are also capable of producing tornadoes and heavy rain that can lead to flash flooding. Likewise, Greenville is just as vulnerable to thunderstorms as any other areas in Eastern North Carolina. The most severe thunderstorms usually occur during summer months.

◆ **Historical Impact and Occurrences**

Severe thunderstorms are very common in Greenville, but very few of them actually cause significant damage.



Table 9-A:
Thunderstorms in Areas of Pitt County (1990s)

<u>Location</u>	<u>Date</u>	<u>Event Type</u>	<u>Property Damage</u>
Winterville	5/19/1993	Thunderstorm	\$57.6K
Pitt County	1/7/1995	Thunderstorm	\$82.6K
Black Jack	4/24/1995	Thunderstorm	\$5.5K
Black Jack	5/2/1995	Thunderstorm	\$54.7K
Grifton	5/19/1995	Thunderstorm	\$54.7K
Farmville	11/11/1995	Thunderstorm	\$54.7K
Greenville	11/11/1995	Thunderstorm	\$54.7K
Ayden	11/11/1995	Thunderstorm	\$54.7K
Simpson	11/11/1995	Thunderstorm	\$54.7K
Winterville	11/11/1995	Thunderstorm	\$54.7K
Greenville	1/19/1996	Tstm Wind	\$21.2K
Calico	8/26/1996	Tstm Wind	\$10.6K
Gardnerville	9/16/1996	Tstm Wind	\$5.3K
Bruce	1/16/1997	Tstm Wind	\$41.5K
Farmville	5/3/1997	Tstm Wind	\$25.9K

Source: National Climatic Data Center

According to the National Climatic Data Center, there were 20 thunderstorms in Pitt County that actually produced numbers in property damage between 1993 and 1998. One specific storm on November 11, 1995 caused damage over a larger area of the County. Table 8 portrays this data. More recent thunderstorm activity is summarized in the following Table 9-B:

<u>Location</u>	<u>Date</u>	<u>Event Type</u>	<u>Property Damage</u>
Greenville	5/27/2000	Tstm Wind	20K
Ayden	8/18/2000	Tstm Wind	20K
Ayden	8/20/2001	Tstm Wind	50K
Greenville	11/11/2002	Tstm Wind	1K
Falkland	6/28/2003	Tstm Wind	5K
NCZ044	3/7/2004	High Wind	29K
Grimesland	6/18/2004	Tstm Wind	5K
ALL Pitt County	3/8/2005	Tstm Wind	100K
NCZ044	6/14/2006	High Wind	5K
Black Jack	7/28/2006	Tstm Wind	30K
Penny Hill	6/29/2007	Tstm Wind	10K
NCZ044	3/8/2008	High Wind	1K

Source: National Climatic Data Center



❖ *SEVERE WINTER STORMS*

◆ Description

Severe winter storms can produce an array of hazardous weather conditions, including heavy snow, blizzards, freezing rain and ice pellets, and extreme cold. Severe winter storms are extra-tropical cyclones fueled by strong temperature gradients and an active upper-level jet stream. The winter storms that impact North Carolina generally form in the Gulf of Mexico or off the southeast Atlantic Coast. Few of these storms result in blizzard conditions, defined by the presence of the winds in excess of 35 mph, falling and blowing snow, and a maximum temperature of 20 degrees Fahrenheit. While the frequency and magnitude of snow events are highest in the mountains due to the elevation, the geographical orientation of the mountains and piedmont contribute to a regular occurrence of freezing precipitation events (e.g., ice pellets and freezing rain) in the piedmont.

◆ Likelihood of Occurrence

The entire State of North Carolina has a likelihood of experiencing severe winter weather. The threat varies by location and by type of storm. Coastal areas typically face their greatest threat from nor'easters and other severe winter coastal storms. These storms can contain strong waves and result in extensive beach erosion and flooding. Freezing rain and ice storms typically occur once every several years at coastal locations, and severe snowstorms have been recorded occasionally in coastal areas.

It is significant that when winter weather does hit the City of Greenville, it does have the potential of being severe. In 1997, FEMA commissioned the National Climatic Data Center (NCDC) to compile snowfall extreme statistics for the conterminous United States. One-day observed maximum total snowfall amounts (in inches) were compiled and consolidated by city. Out of the eight (8) total climate divisions in North Carolina, Greenville's climate division (#7) ranked third in terms of average one-day extreme snowfall.

◆ Historical Impact and Occurrences

While severe winter storms are a rarity in the City of Greenville, this very fact is one of the reasons they have such an impact on the population. Approximately three major storms in the last 20 years have resulted in power outages, immobilized traffic, and stranded people. Presidential disaster warnings for winter storms were declared in North Carolina in March of 1993, January 1996 and February 2000. Since 1993, 16 deaths and 190 injuries have been attributed to snow and ice events throughout the State, along with an estimated \$137 million dollars in property damages. Snow and sleet occur on an average of once or twice a year. In an average winter, snowfall ranges from about one inch to about nine inches. While most people can protect themselves from winter storms, livestock, crops, and real property bear the brunt of its force. Unprotected livestock, and even sheltered animals, if there are power failures, can be destroyed or injured sufficiently to lose commercial value. Winter grain and fruit trees succumb to ice



storms and the loss of power, communication, and the immobilization of traffic represent a financial loss to industry. However, the main effect of winter storms in Greenville is immobility.

One specific storm is noted, on January 19, 1998, low pressure intensified off the South Carolina Coast and produced snow across much of Eastern North Carolina. Totals ranged from 4 inches in Martin and Pitt Counties to a trace along the coast. Numerous accidents were reported as vehicles slid into ditches.

❖ ***NOR'EASTERS***

◆ **Description**

In the past decade, research meteorologists have recognized the significance of nor'easters and their potential to cause damage along the coast. Unlike hurricanes, these storms are extra-tropical, deriving their strength from horizontal gradients in temperature.

The presence of the warm Gulf Stream waters off the eastern seaboard during the winter acts to dramatically increase surface horizontal temperature gradients within the coastal zone. During winter offshore cold periods, these horizontal temperature gradients can result in rapid and intense destabilization of the atmosphere directly above and shoreward of the Gulf Stream. This period of instability often precedes wintertime coastal extra-tropical cyclone development.

It is the temperature structure of the continental air mass and the position of the temperature gradient along the Gulf Stream that drives this cyclone development. As a low pressure deepens, winds and waves can uninhibitedly increase and cause serious damage to coastal areas as the storm generally moves to the northeast. The proximity of North Carolina's coast to the Gulf Stream makes it particularly prone to nor'easters.

◆ **Likelihood of Occurrence**

Although nor'easters are more diffuse and less intense than hurricanes, they occur more frequently and cover larger areas and longer coastal reaches at one time. As a result, North Carolina is as much at risk to a nor'easter as it is any other tropical storm event. However, the most significant damage shown by a nor'easter occurs at the coast. Therefore, Greenville is at risk to weather associated with a nor'easter, but the impact of the damage done is much less than that of a tropical storm or hurricane. Greenville mainly sees the high winds associated with nor'easters. Nor'easters occurring during the winter months may produce an accumulation of snow and/or ice.

Analysis of nor'easter frequency by researchers reveals fewer nor'easters during the 1980s. However, the frequency of major nor'easters (class 4 and 5 on the Dolan-Davis scale – see table 10) has increased in recent years. In the period 1987 to 1993, at least one class 4 or 5 storm has occurred each year along the Atlantic seaboard of the United States, a situation duplicated only once in the last 50 years.



Table 10:
The Dolan-Davis Nor'easter Intensity Scale

<u>Storm Class</u>	<u>Beach Erosion</u>	<u>Dune Erosion</u>	<u>Overwash</u>	<u>Property Damage</u>
1 (Weak)	Minor changes	None	No	No
2 (Moderate)	Modest; mostly to lower beach	Minor	No	Modest
3 (Significant)	Erosion extends across beach	Can be significant	No	Loss of many structures at local level
4 (Severe)	Severe beach erosion & recession	Severe dune erosion or destruction	On low beaches	Loss of structures at community-scale
5 (Extreme)	Extreme beach erosion	Dunes destroyed over extensive areas	Massive in sheets and channels	Extensive at regional-scale; millions of dollars

Source: North Carolina Division of Emergency Management

◆ **Historical Impact and Occurrences**

A number of notable nor'easters have impacted North Carolina in recent decades, including the Ash Wednesday Storm of March 1962, but they were typically only of local concern to coastal municipalities. One exception to this was the nor'easter of late October and early November, 1990, which loosened a dredge barge that struck and destroyed approximately five roadway segments of the Bonner Bridge in Dare City. Greenville felt winds and rain from this storm, but nothing more.

“The Perfect Storm”: Oct. 28 – Nov.1, 1991 – On October 28, 1991, a nor'easter of low pressure developed along a cold front a few hundred miles east of Nova Scotia. With strong upper air support, this nor'easter rapidly deepened and became the dominant weather feature in the Western Atlantic. Hurricane Grace, which was also heading northwest, took a turn eastward in response to the currents caused by the nor'easter. As low-pressure continued to deepen, Hurricane Grace and the low-pressure nor'easter collided to create a subtropical event of massive proportions. Much of the East Coast was severely damaged by high winds, high tides, and substantial beach erosion. On October 30th and 31st, this storm reached its maximum intensity, and is also known as the great “Halloween Storm.” North Carolina’s coast specifically was lashed with occasional winds of 35-45 miles per hour for five consecutive days, and waves from 10 to 30 feet in height struck the coastline and pushed high tides three to seven feet above normal. Greenville also felt the affects of these winds, but there is no data of any significant damage in Greenville. Total damages in North Carolina, however came in at about \$6.7



million dollars, and damaged 525 houses. (Source: NCDC: Satellite Events Archive, <http://www.ncdc.noaa.gov/oa/satellite>)

Areas closer to the coast suffered most recently on January 27, 1998, devastated by a nor'easter that originated off the southeast coast and combined with a strong high-pressure system over New England to produce gale force winds along the coast. Tides between 14 and 18 feet resulted in coastal flooding and lead to major beach erosion problems along the Outer Banks. In Nags Head alone, 18 houses were condemned and along the 11-mile stretch of shoreline an average of 45 feet of beach washed away. On Ocracoke Island, N.C., Route 12 was washed over and much of the dune structure on the northern end of the island was washed away. In the wake of the storm, some sound-side flooding was reported on Hatteras Island, and heavy rains of up to 5 inches caused lowland flooding and some secondary roads to become impassible. Total damages for the entire region during this event are estimated at 22 million dollars.

❖ **WILDFIRES**

◆ **Description**

A wildfire is an undesirable, uncontrolled burning of grasslands, brush or woodlands. According to the National Weather Service, more than 100,000 wildfires occur in the United States each year. Approximately 90% of wildfires start as a result of human actions (i.e., campfires, debris burning, smoking, etc.); lightning starts the other 10%.

The potential for wildfire depends upon surface fuel characteristics, weather conditions, recent climate conditions, topography, and fire behavior. Fuels are anything that fire can and will burn, and are the combustible materials that sustain a wildfire. Typically, this is the most prevalent vegetation in a given area. The intensity of fires and the rate with which they spread is directly related to the wind speed, temperature and relative humidity. Climatic conditions such as long-term drought also play a major role in the number and intensity of wildfires, and topography is important because the slope and shape of the terrain can change the rate of speed at which fire travels. There are four major types of wildfires. **Ground fires** burn in natural litter, duff, roots or sometimes-high organic soils. Once started they are very difficult to control, and some ground fires may even rekindle after being extinguished. **Surface fires** burn in grasses and low shrubs (up to 4' tall) or in the lower branches of trees. They have the potential to spread rapidly, and the ease of their control depends upon the fuel involved. **Crown fires** burn in the tops of trees, and the ease of their control depends greatly upon wind conditions. **Spotting fires** occur when burning embers are thrown ahead of the main fire, and can be produced by crown fires as well as wind and topographic conditions. Once spotting begins, the fire will be very difficult to control. Wildfires become significant threats to life and property along what is known as the "wildland/urban interface." The wildland/urban interface is defined as the area where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels. Since 1985, approximately 9,000 homes have been lost to urban/wildland interface fires across the United States.



◆ **Likelihood of Occurrence**

In North Carolina, wildfire potential has been assessed using State Forest Service records for the period 1950-1993. As development has spread into areas which were previously rural, new residents have been relatively unaware of the hazards posed by wildfires, and have used highly flammable material for constructing buildings. This has not only increased the threat of loss of life and property, but has also resulted in a greater population of people less prepared to cope with wildfire hazards. The southern coastal plain is most vulnerable to wildfire hazards. Counties were classified as High (score of 3), Moderate (score of 2), or Low (score of 1) depending on their rank, for both number of fires and number of acres burned. The scores for both of these statistics were then added to generate a combined classification. The combined scores ranged from a low of 2 to a high of 5. Greenville and Pitt County's combined score was a 2, indicating a low probability of occurrence.

◆ **Historical Impact and Occurrences**

Between 1928 and 2000, the North Carolina Division of Forest Resources has recorded a total of 281,660 wildfires for an average number of 3,858 fires per year. For that same period, a total of 9,598,498 acres have burned for an average of 131,486 acres per year. According to the U.S. Forest service, a total of 4,949 fires burned 25,146 acres and destroyed 27 homes and 275 structures in North Carolina during the year 2000.

Whereas the City of Greenville is quite urbanized, the impact of wildfires has been quite low, despite the existence of wildfires farther out in Pitt County. Increased development over the years has increased the potential impact of wildfires as structures that locate near woodlands become vulnerable. According to data provided by the State Forestry Service, the frequency of wildfires in Pitt County is relatively moderate in the rural areas. Since 1994 there have been 117 wildfires resulting in 390 acres burned. None of this was in the City of Greenville directly.

❖ ***EARTHQUAKES***

◆ **Description**

Earthquakes are geologic events that involve movement or shaking of the Earth's crust. Earthquakes are usually caused by the release of stresses accumulated as a result of the rupture of rocks along opposing fault planes in the Earth's outer crust. These fault planes generally follow the outlines of the continents.

Earthquakes are measured in terms of their magnitude and intensity. Magnitude is measured using the Richter Scale, an open-ended logarithmic scale that describes the energy release of an earthquake through a measure of shock wave amplitude. Each unit increase in magnitude on the Richter Scale corresponds to a ten-fold increase in wave amplitude, or a 244-fold increase in energy. Intensity is most commonly measured using



the Modified Mercalli Intensity (MMI) Scale. It is a twelve-level scale based on direct and indirect measurements of seismic effects.

◆ **Likelihood of Occurrence**

In North Carolina, earthquake epicenters are generally concentrated in the active Eastern Tennessee Seismic Zone. The Eastern Tennessee Seismic Zone is part of a crescent of moderate seismic activity risk extending from Charleston, South Carolina northwestward into eastern Tennessee and then curving northeastward into central Virginia. While there have not been any earthquakes with a MMI intensity greater than IV since 1928 in this area, it has the potential to produce an earthquake of significant intensity in the future.

North Carolina's susceptibility to earthquakes decreases from west to east in relation to the Eastern Tennessee Seismic Zone. Generally, there are three different zones of seismic risk in North Carolina. The eastern portion of the State faces minimal effects from seismic activity. Locations in the middle and southeastern areas of the State face a moderate hazard from seismic activity, while the area from Mecklenburg City west through the Blue Ridge faces the greatest risk from seismic activity. These different levels of risk correspond to proximity to areas with historical seismic activity and changes in topography.

The City of Greenville is located in the portion of North Carolina least susceptible to the effects of earthquakes.

◆ **Historical Impact and Occurrences**

Earthquakes are relatively infrequent but not uncommon in North Carolina. From 1568 to 1992, 157 earthquakes have occurred in North Carolina. The earliest North Carolina earthquake on record is that of March 8, 1735, near Bath. It is likely that this earthquake was less than intensity V (Slightly strong; sleepers awake). During the great earthquake of 1811 (intensity VI), centered in the Mississippi Valley near New Madrid, Missouri, tremors were felt throughout North Carolina. The most property damage in North Carolina ever attributed to an earthquake was caused by the August 31, 1886, Charleston, South Carolina shock. The quake left approximately 65 people dead in Charleston and caused chimney collapses, fallen plaster, and cracked walls in Abbottsburg, Charlotte, Elizabethtown, Henderson, Hillsborough, Raleigh, Waynesville, and Whiteville. On February 21, 1916, the Asheville area was the center for a large intensity VI earthquake, which was felt in Alabama, Georgia, Kentucky, South Carolina, Tennessee, and Virginia. Subsequent minor earthquakes have caused damage in North Carolina in 1926, 1928, 1957, 1959, 1971, 1973, and 1976. The nearest occurrence of an earthquake to Greenville and Pitt County surfaced in Craven County, with an approximate magnitude of 3.0 on the Richter Scale. There is no history of damage in the City of Greenville resulting from earthquakes that made the scale. However, in 1994, a small tremble did occur in Greenville.



Table 11:
Modified Mercalli Intensity Scale for Earthquakes

<u>Scale</u>	<u>Intensity</u>	<u>Description of Effects</u>	<u>Richer Scale Mag.</u>
I	Instrumental	Detected only on seismographs	
II	Feeble	Some people feel it	<4.2
III	Slight	Felt by people resting; like a truck	
IV	Moderate	Felt by people walking	
V	Slightly Strong	Sleepers awake; church bells ring	<4.8
VI	Strong	Trees sway; suspended objects swing, objects fall off shelves	<5.4
VII	Very Strong	Mild alarm; walls crack; plaster falls	<6.1
VIII	Destructive	Moving cars uncontrollable; masonry fractures, poorly constructed buildings damaged.	
IX	Ruinous	Some houses collapse; ground cracks; pipes break open	<6.9
X	Disastrous	Ground cracks profusely; many buildings destroyed; liquefaction and landslides widespread	<7.3
XI	Very Disastrous	Most buildings and bridges collapse; roads, railways and pipes destroyed; general triggering of other hazards	<8.1
XII	Catastrophic	Total destruction; trees fall; ground rises and falls in waves	>8.1

Source: North Carolina Division of Emergency Management

B. VULNERABILITY ANALYSIS

Natural hazards pose problems to humans when human activity gets in the way of the impacts that occur as a matter of course during and after a hazard. Vulnerability to a natural hazard can be defined as the extent to which people experience harm and property damage from a hazard. Hazards may result in loss of life or injury to people and livestock; loss or damage to homes, businesses, and industries; loss or damage to automobiles, furnishings, records and documents; damages or interruptions to power and telephone lines; damage or closing of roads, railroads,



airports, and waterways; and general disruption of life. It is important to know where and to what extent the community is susceptible to the impacts of natural hazards.

Vulnerability to natural hazards exists both at the present time and in the future. The present level of development and infrastructure generates a set of conditions that result in every area having some degree of vulnerability to natural hazards. That degree of vulnerability will change in the future as an area experiences an increase or decrease in development and whether the community implements or ignores hazard mitigation. Therefore, we can speak of both present vulnerability and future vulnerability. The previous section gave a description of each hazard, and identified its likelihood of occurrence and historical impacts. The City of Greenville is most vulnerable to riverine flooding and urban storm water flooding caused mostly by flash floods as they relate to other major hazard events, including severe thunderstorms, tropical storms and hurricanes.

The entire jurisdiction is relatively flat with elevations at or below 25-feet above sea level. Greenville’s Flood Hazard areas, as identified by FEMA (100 and 500-year floodplains), are the primary locations for vulnerability to flooding being that the extents of most flood hazard events occur within these areas. Other hazards that are identified may affect Greenville’s entire jurisdiction due to its geographic location in the Coastal Plains Region of North Carolina, and within climate division 7 as identified by the National Climatic Data Center.

The City of Greenville has a high vulnerability to tornadoes, mostly as they are caused by other tropical storm events, although they usually don’t cause much damage, or only cause damage at an F0 or F1 magnitude on the Fujita-Simpson Scale.

An area’s vulnerability will change with time. For instance, if the current development patterns are projected into the future, it is possible to develop estimates of the population and the amount of development that will exist in an area at some future point. Future vulnerability will also be analyzed with this plan, and mitigation strategies assessed based on some key planning practices of the City of Greenville.

C. IMPACT ANALYSIS & LIKELIHOOD OF OCCURRENCE

Certain natural hazards are considered more of a threat than others within the City of Greenville, which will be the focus of this analysis. The combination between a hazards impact and its likelihood of occurrence determine Greenville’s overall risk conclusion to the 8 natural disasters described by this plan. Hazard impacts are broken down as follows:

- **Critical Impact** – 25 to 50% damage associated with the disaster, which either occurs within a certain geographic area or has a widespread effect (ex. – within the 100-year floodplain, a 50 to 100-year flooding event has a critical impact; a category 2 hurricane or greater has a critical impact within the floodplain due to its rain, but also widespread due to associated winds and possible tornadoes), and may cause severe injuries. More than 25% of property could be severely damaged by a critical storm.
- **Limited Impact** – 10 to 25% damage associated with the disaster, which either occurs within a certain geographic area or has a widespread effect (ex. – an F1 moderate tornado would have a limited impact because it may not cover a lot of ground, but a nor’easter would



have a limited impact over a larger geographic area), and may cause some minor injuries. More than 10% of property could be severely damaged

- **Minor Impact** – Less than 10% damage associated with the disaster. Minimal quality of life impact, and less than 10% of properties are severely damaged.

Some hazards are more likely to occur than others, but may have limited impacts. The likelihood of hazard occurrence is hypothetical, however due to Greenville’s history of severe weather, it is important to address what is predicted to occur. Hazard likelihood is broken down as follows:

- **Highly Likely** – There is near 100% probability that the hazard will occur in the next year.
- **Likely** – Between 10 and 100% probability that the hazard will occur in the next year, or at least one chance in the next 10 years
- **Possible** – Between 1 and 10% probability in the next year, or at least one chance in the next 100 years
- **Unlikely** – Less than a 1% probability in the next year, or less than one chance in the next 100 years

Table 12 describes Greenville’s vulnerability by hazard in order to provide a profile of each hazard relative to the others.

Table 12:
Hazard Risk Index

<u>Hazard</u>	<u>Magnitude</u>	<u>Likelihood of</u>		
		<u>Occurrence</u>	<u>Impact</u>	<u>Risk Conclusion</u>
Flooding*	10-49 year event	Likely	Limited	High Risk
	50-100 year event	Possible	Critical	
Hurricanes*	Tropical Storm	Likely	Limited	High Risk
	Category 1	Likely	Limited	
Tornadoes*	Category 2	Possible	Critical	Moderate Risk
	F0 (Gale)	Likely	Minor	
Thunderstorms	F1 (Moderate)	Likely	Limited	Moderate Risk
	Severe	Highly Likely	Minor	
Nor’Easters	Categories 1&2	Likely	Limited	Moderate Risk
Winter Storms	Severe	Possible	Limited	Low Risk
Wildfires	Category 1	Unlikely	Limited	Low Risk
	Category 2	Unlikely	Minor	Low Risk
Earthquakes	Moderate	Unlikely	Minor	Very Low Risk

* indicates a hazard in which a critical event has occurred in Greenville that caused significant damages and injuries or possible deaths
Source: “Keeping Natural Hazards from becoming Disasters” published by NCDEM



Each hazard has been identified as having a potential risk within the City of Greenville based on this table. The magnitude gives specific classifications of hazards based on their scales. Since flooding, hurricanes, and tornadoes have the greatest risk in Greenville and Pitt County, the risk was assessed based on more than one type of storm in terms of magnitude. These three storms are also the main focus of the plan. For example, a tropical storm has a higher risk than a category 1 or 2 hurricane, but has a limited impact.

END OF SECTION



**VULNERABILITY
ASSESSMENT**

A. LAND USE VULNERABILITY

A series of tables and maps are used to describe vulnerability within two locations based on occurrence patterns. The first is to describe vulnerability within the floodplain areas as identified by FEMA. Due to the fact that Greenville has recently experienced a significant flood that swelled as far as the 500-year flood limits, the floodway, 100-year and 500-year floodplains are all included in this analysis. The other set of maps describe vulnerability within Greenville’s jurisdiction limits, which includes both the City limits, and the extraterritorial jurisdiction (ETJ).

Tables 13 and 14 describe Greenville’s land use composition within the entire jurisdiction and within the floodplain, and include the acreage, current tax value and building value. This data is approximately 85% accurate for 2010. Land use is broken down as follows:

- Single Family – Includes all single family attached and detached housing, and mobile homes located on their own lot.
- Multi-Family – Includes townhouse communities,, condominiums, and apartments .
- Duplex
- Mobile Home
- Mobile Home Parks
- Institutional – Includes schools, churches, libraries, retirement homes, day care centers, and medical uses including the hospital.
- Commercial – All types of commercial including neighborhood businesses, shopping centers and hotels.
- Industrial – Includes light and heavy industries, industrial parks, and also includes the airport
- Landfill
- Public Parking
- Recreation – Includes all public and private recreation areas, cemeteries, and designated open space or “common areas.”
- Cemetery
- Office – Includes professional, governmental, and medical offices.
- Utility – Includes electric substations, water tanks, and utility headquarters.
- Vacant – Includes all sites that are vacant or have vacated buildings, but also includes agricultural areas with a building that has value taking up less that 20% of the site, and public parking lots and public spaces not designated as recreational.



Table 13:
Greenville Land Use and Property Vulnerability by Total Jurisdiction

Land use	Parcels	Acres	Percent	Bldg Value	Total Tax Value
Cemetery	37	181	0.46%	\$4.7	\$7.0
Commercial	1,483	1,868	4.75%	\$396.7	\$698.0
Duplex	1,686	433	1.10%	\$117.0	\$147.7
Industrial	135	1,923	4.89%	\$50.8	\$64.4
Institutional	601	1,728	4.40%	\$807.6	\$980.8
Landfill	29	171	0.44%	\$1.0	\$3.0
Mobile Home	370	349	0.89%	\$9.7	\$19.0
Mobile Home Park	227	424	1.08%	\$13.0	\$22.0
Multi-Family	5,519	1,852	4.71%	\$686.4	\$873.8
Office	736	624	1.59%	\$243.4	\$364.4
Public Parking	78	19	0.05%	\$6.5	\$12.5
Recreation	580	1,533	3.90%	\$93.8	\$127.8
Single Family	12,116	6,384	16.23%	\$1,577.2	\$1,974.1
Utility	78	505	1.28%	\$14.3	\$34.7
Vacant	10,068	21,329	54.24%	\$1,584.9	\$2,241.0
Total	33,743	39,323	100.00%	\$5,606.8	\$7,570.3

Table 14:
Greenville Land Use and Property Vulnerability by Floodplain

Land Use	Parcels	Acres	Percent	Bldg Value	Total Tax Value
Cemetery	2	2	0.01%	\$0.02	\$0.04
Commercial	160	447	3.88%	\$18.67	\$31.07
Duplex	103	20	0.18%	\$6.28	\$8.32
Industrial	50	280	2.43%	\$9.36	\$15.51
Institutional	67	271	2.36%	\$35.80	\$44.14
Mobile Home	281	227	1.97%	\$6.03	\$10.63
Mobile Home Park	65	223	1.93%	\$2.13	\$4.88
Multi-Family	192	355	3.09%	\$64.52	\$80.51
Office	20	71	0.62%	\$7.30	\$12.31
Public Parking	2	7	0.06%	\$0.00	\$0.30
Recreation	168	585	5.08%	\$11.09	\$17.11
Single Family	821	1,173	10.20%	\$67.20	\$90.73
Utility	35	776	6.74%	\$11.70	\$29.29
Vacant	1,391	7,068	61.44%	\$158.40	\$228.05
TOTALS	3,357	11,504	100.00%	\$398.52	\$572.91

Map 8 and Map 9 illustrate the above data.



B. BUILDING & INFRASTRUCTURE VULNERABILITY

17,301 buildings were calculated for the City of Greenville’s jurisdiction in 2003. The City of Greenville’s GIS-based building data has not been updated since 2003. According to Table 13 above, the building value within Greenville’s jurisdiction as of 2010 is around 5.6 billion dollars, which is vulnerable to all types of natural hazards, specifically those that occur in sporadic patterns, or have the potential of covering the entire City.

1,475 buildings were located within the floodplain as of 2003. The current tax building value of parcels in the floodplain/floodway is around 398 million dollars per Table 13 (above), an estimated increase of only 81 million dollars compared to the 2003 total (317 million dollars). Based on 1998 data (prior to Hurricane Floyd), there were 3,075 buildings located within the floodplain. The City of Greenville has implemented policies in an effort to phase out development within the floodplain. If no new building construction had occurred within Greenville’s floodplain areas, the buildings that existed prior to 2003 would be worth approximately 378 million dollars today, given inflation during that period. Therefore, the City’s efforts to discourage new building construction in these areas appear to have had some effect. These policies are mentioned as mitigation strategies, which have since been updated in this 2010 version of the plan.

During the HMGP buyout process, the City purchased 268 properties, and placed deed restrictions on these properties to ensure that future development could not occur. Other properties were purchased using CDBG and State Repair and Replacement funds, or other sources of funding. Although there are instances where building permits will be necessary within the floodplain to ensure that citizens of Greenville can still use their properties, this area will not experience growth and the vulnerability to flooding events has been greatly decreased. This is mainly due to the City’s commitment to make changes to local ordinances and policies after Hurricane Floyd left its mark within the City of Greenville, significantly affecting its citizens’ way of life. As part of its buy-out program, the City is currently leasing 93 of its buyout properties to parties who wish to use the properties for conservation purposes (as community gardens, grass lots, picnic grounds, etc.). The City will continue to manage these buyout properties going forward.

The City has three (3) structures that have more than one claim against the National Flood Insurance Program (NFIP). These structures are known as “repetitive loss structures” and represent properties that are in high-risk flood areas exacerbated by localized drainage concerns. These structures are delineated in Table 15:

Table 15:
NFIP Repetitive Loss Structures in the City of Greenville

<u>Owner Name</u>	<u>Address</u>	<u>Parcel ID #</u>
Melford Ebron	3203 Ellsworth Drive	28855
George Hamilton	210 Lakewood Drive	9576
Mark W. Owens	1106 E. Tenth Street	10726



It is very important to discuss Greenville’s vulnerability of infrastructure such as bridges, roads, railroads, and airports within Greenville’s jurisdiction and floodplain boundaries. Within Greenville’s jurisdiction, the Planning and Zoning Commission approve new subdivisions every month at a fast rate. Most of these are void of street planning within the floodplain, however the increase of suburban sprawl causes more people to drive on busy streets in the instance of an emergency. According to 2003 data collected, there were 442.18 miles of street segments within the City’s jurisdiction and 73.55 within the floodplain (17% of total streets). Additional infrastructure includes bridges, the Seaboard Coastline Railroad, which crosses through Greenville’s jurisdiction, and the Pitt-Greenville Airport, which lies entirely within the floodplain and was severely flooded after Hurricane Floyd.

Other infrastructure that may be affected is the location of water, sewer, gas and electric lines. At the present time, the City of Greenville contracts their utility service with Greenville Utilities Commission (GUC) and does not have access to GIS data related to these utility lines. The ability for GUC to acquire this data and provide it to the City will be a mitigation strategy to document future vulnerability.

Map 10 illustrates building and infrastructure vulnerability.

C. CRITICAL FACILITIES

Critical facilities include those facilities that are necessary in the daily operation of a community. Certain critical facilities are vital to the response and recovery efforts in the wake of a disaster resulting from a natural or technological hazard. The following is a listing of the types of critical facilities identified by this plan:

- Government/Community Facilities – Includes public buildings such as shelters, , libraries, convention centers, and government centers. These buildings should be operational at least 72 hours following an event, and can be used as public gathering places and shelters.
- Fire Stations – Includes all City and Volunteer Fire Stations. Fire Stations are crucial for emergencies and must be operational within 24 hours following an event.
- Hospital – The Pitt County Memorial Hospital is critical, and should be operational immediately following an event.
- Utility– Includes electric substations, water towers, water and sewer treatment plants and utility operations facilities. It is extremely important that the operations of the City of Greenville are secured following an event.
- Schools – Includes all the Pitt County Schools located within the City of Greenville. Like community facilities, it is important that schools are available to be used as shelters or gathering spaces after an event, and should be operational within 72 hours.
- University Facilities – Due to the fact that about one-third of Greenville’s population is comprised of students, it is important to list similar facilities that the university could and should provide following a disaster event. These can include auditoriums, libraries, recreation centers, and dining halls.
- Parks & Recreation Facilities – Includes major public recreational facilities that can be used as gathering places in the event of an emergency.



Table 16 (following two pages) provides a comprehensive listing of the facilities that have been identified as being critical for the City of Greenville, and includes the associated costs of the building and the land in terms of vulnerable value. University facilities may have higher land values due to the fact that multiple buildings are found on the same parcel and/or are grouped together as part of larger complexes or campuses. Map 13 illustrates this data.

Table 16:
Critical Facilities of the City of Greenville (current)

Name	Type	Flood-plain?	Land Value	Bldg Value	Heated SF
Fire Station #2	Fire		\$138,000	\$694,476	6,143
Fire Station #3	Fire		\$427,379	\$791,752	9,247
Fire Station #4	Fire	Yes	\$80,000	\$486,510	4,439
Fire Station #5	Fire		\$159,495	\$662,155	6,324
Fire Station #6	Fire		\$162,750	\$680,161	7,202
City Hall	Gov/Comm.		\$351,820	\$5,072,632	46,847
Convention Center	Gov/Comm.		\$6,549,682	\$5,332,483	51,744
County EOC	Gov/Comm.		\$1,840,000	\$8,269,106	78,550
County Office Complex	Gov/Comm.		\$1,840,000	\$8,269,106	78,550
GHA - Main	Gov/Comm.		\$252,700	\$1,579,136	7,396
Intergenerational Center	Gov/Comm.		\$11,622	\$269,839	4,380
Municipal Building	Gov/Comm.		\$168,060	\$2,356,458	27,207
NC State Highway Patrol	Gov/Comm.		\$643,598	\$652,435	9,134
Pitt County Detention Cntr	Gov/Comm.	Yes	\$1,743,575	\$31,662,501	25,790
Public Works Facility	Gov/Comm.		\$342,000	\$823,471	14,854
Sheppard Library	Gov/Comm.		\$622,762	\$4,558,281	23,581
Pitt County Memorial Hosp	Hospital		\$5,289,000	\$241,394,862	761,334
Boyd Lee Park	Park/Recreation		\$1,002,118	\$1,703,154	17,400
City Stadium	Park/Recreation		\$1,640,034	NA	NA
East Carolina Rec Complex	Park/Recreation	Yes	\$4,815,000	\$139,612	1,890
Elm St Park	Park/Recreation	Yes	\$324,405	\$298,666	3,476
Elm St. Gym	Park/Recreation	Yes	\$580,500	\$701,487	14,248
Eppes Rec Center	Park/Recreation		\$194,600	\$1,042,764	25,546
Greenville Aquatics & Fit	Park/Recreation	Yes	\$104,800	\$2,685,614	30,535
Jaycee Park	Park/Recreation		\$189,600	NA	NA
PCMH Wellness Cntr (Viquest)	Park/Recreation		\$2,884,000	\$6,526,960	54,522
River Birch Tennis Ctr	Park/Recreation	Yes	\$1,223,000	\$386,211	576
River Park North	Park/Recreation	Yes	\$321,748	\$1,002,155	10,500
Teen Center	Park/Recreation		\$257,950	\$149,472	2,190
Blount House (ECU Police)	Police		\$83,632	\$121,208	3,307
Police Subst. (West Greenville)	Police		\$23,500	\$113,056	1,568
Police Station/Fire Station #1	Police/Fire		\$198,000	\$3,429,302	31,313



CITY OF GREENVILLE – HAZARD MITIGATION PLAN



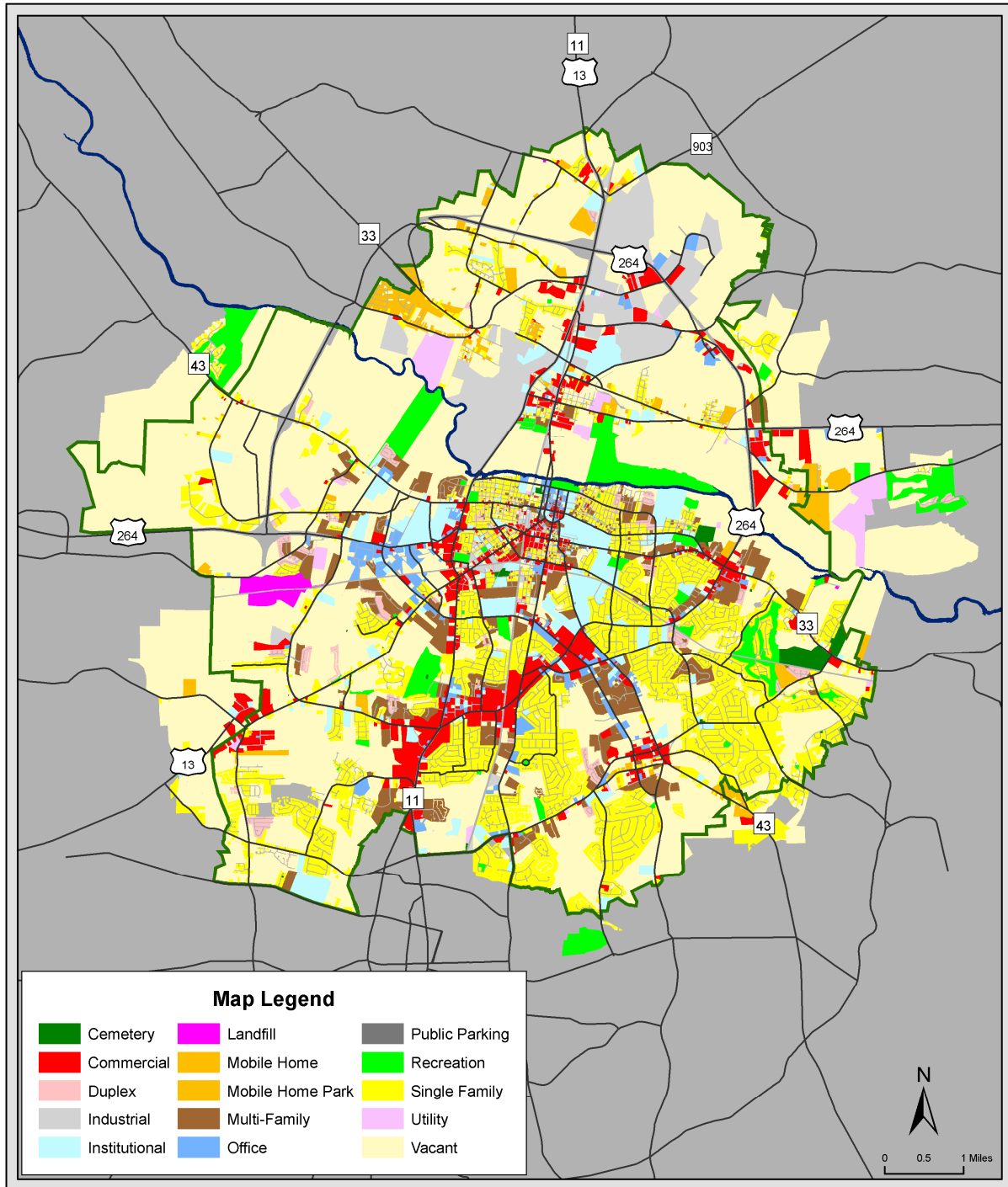
Name	Type	Flood-plain?	Land Value	Bldg Value	Heated SF
Agnes Fullilove ES	School		\$79,100	\$473,722	16,536
Eastern ES, Jaycee Pk, et	School		\$25,000	\$97,410	1,516
EB Aycock MS	School		\$1,228,500	\$8,388,273	120,218
Elmhurst ES	School		\$1,242,800	\$2,730,080	39,041
Eppes MS	School		\$612,000	\$11,287,799	100,650
JH Rose HS	School		\$1,508,500	\$19,358,434	251,265
Sadie Saulter School	School		\$103,600	\$3,295,970	37,453
South Central HS	School		\$1,271,824	\$26,022,729	277,004
South Greenville ES	School		\$258,090	\$2,809,400	12,018
Third Street ES	School		\$214,500	\$634,516	11,706
Todd Dining/Residence Halls	School		\$3,100,800	\$43,535,767	129,162
Wahl-Coates ES	School	Yes	\$1,226,720	\$4,438,368	4,167
Wellcome MS	School		\$392,850	\$5,774,784	19,376
Wintergreen ES	School		\$433,112	\$8,879,672	35,488
Cotanche Building	University		\$274,420	\$1,304,045	18,303
ECU Athletic Facilities	University		\$3,108,450	\$18,773,207	105,990
ECU Health Science Complex	University		\$4,195,000	\$66,917,782	383,160
ECU Main Campus	University		\$8,863,654	\$168,697,439	241,623
Facilities Services Steam Plant	Utility	Yes	\$1,569,100	\$132,036	13,835
GUC - Operations Center	Utility	Yes	\$296,800	\$4,656,457	11,664
GUC Wastewater Treatment	Utility	Yes	\$312,125	\$1,649,124	6,479
GUC water plant	Utility	Yes	\$290,404	\$128,745	1,344

Total value of all critical facilities equals approximately **\$731.84 million dollars** in building value and **\$65.07 million dollars** in land value. Within the floodplain, building value equals approximately **\$48.37 million dollars**, and land value approximately **\$12.88 million dollars**.

MAPS 8-13 CONTINUE ON THE FOLLOWING 6 PAGES

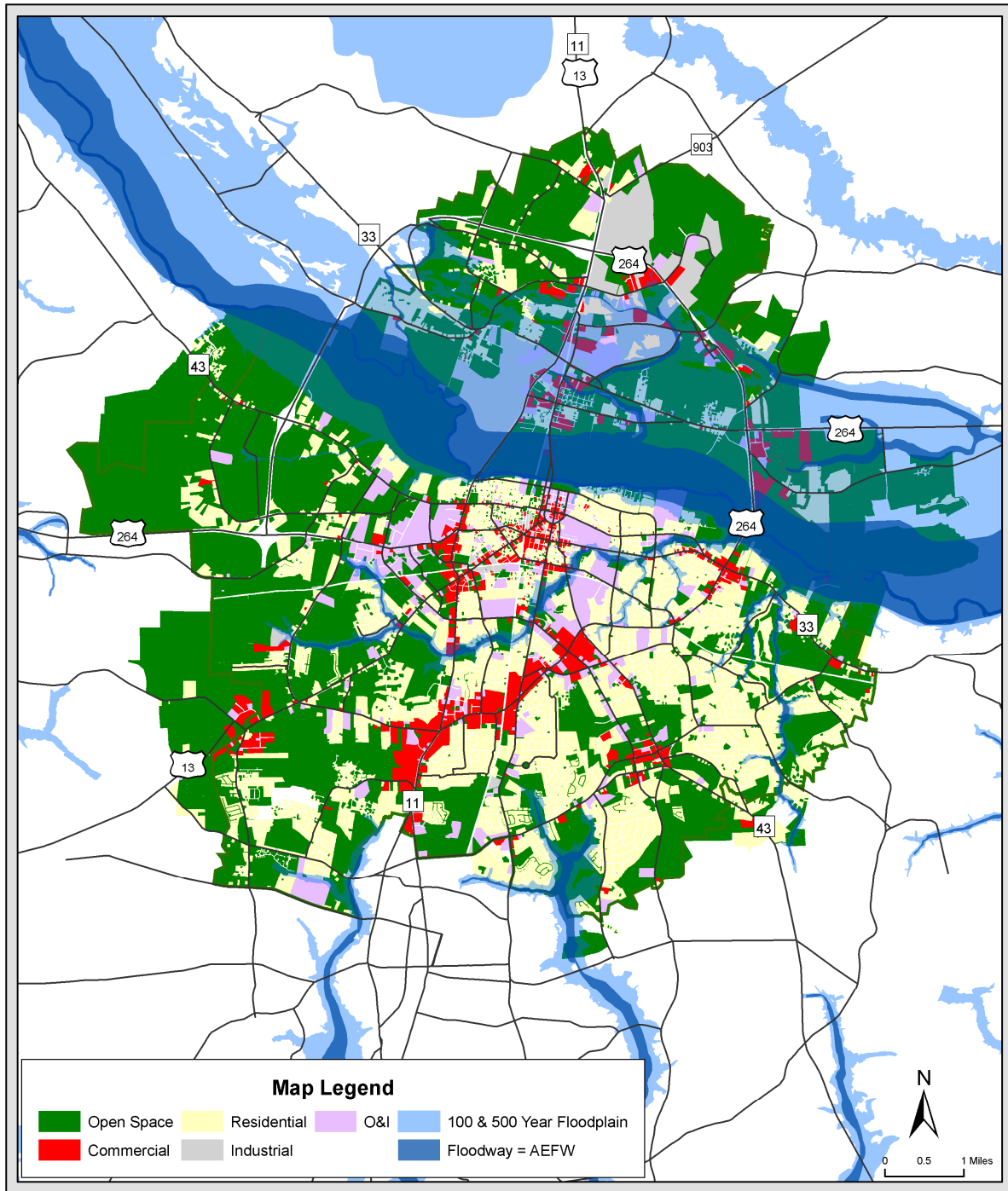


Map 8:
Land Use Vulnerability – Entire Jurisdiction



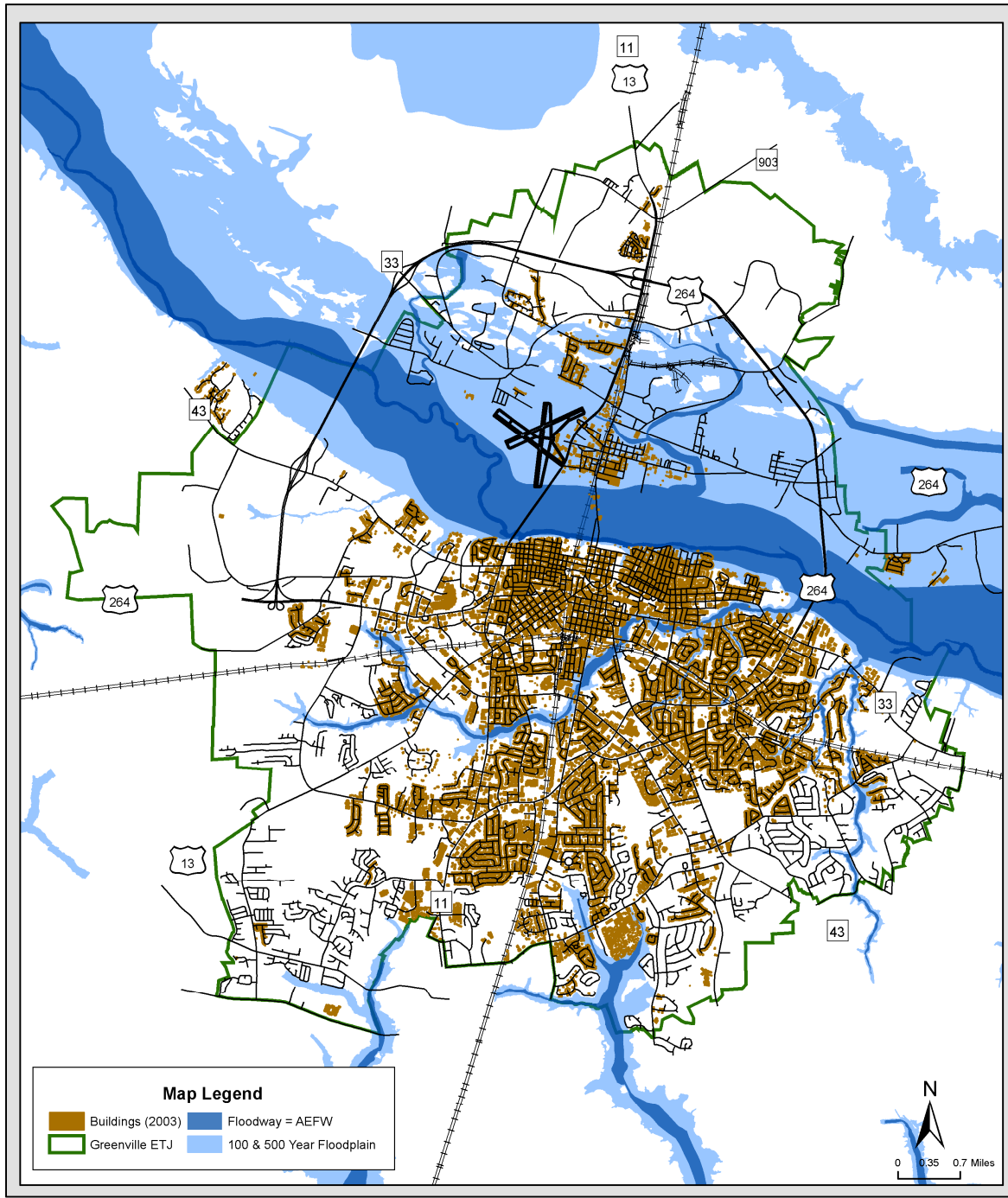


Map 9:
Land Use Vulnerability – Floodplain



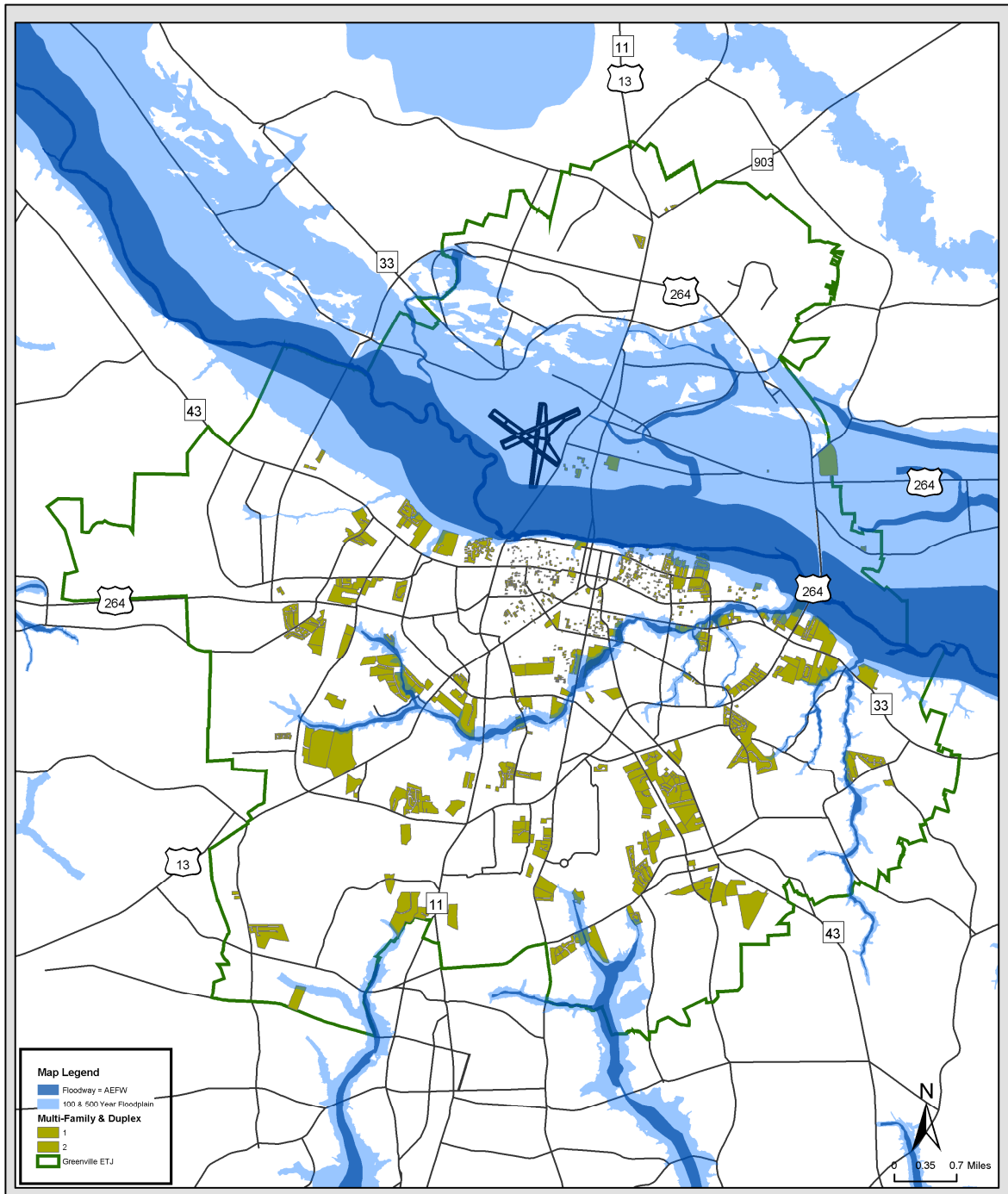


Map 10:
Building & Infrastructure Vulnerability (2003 Building data):



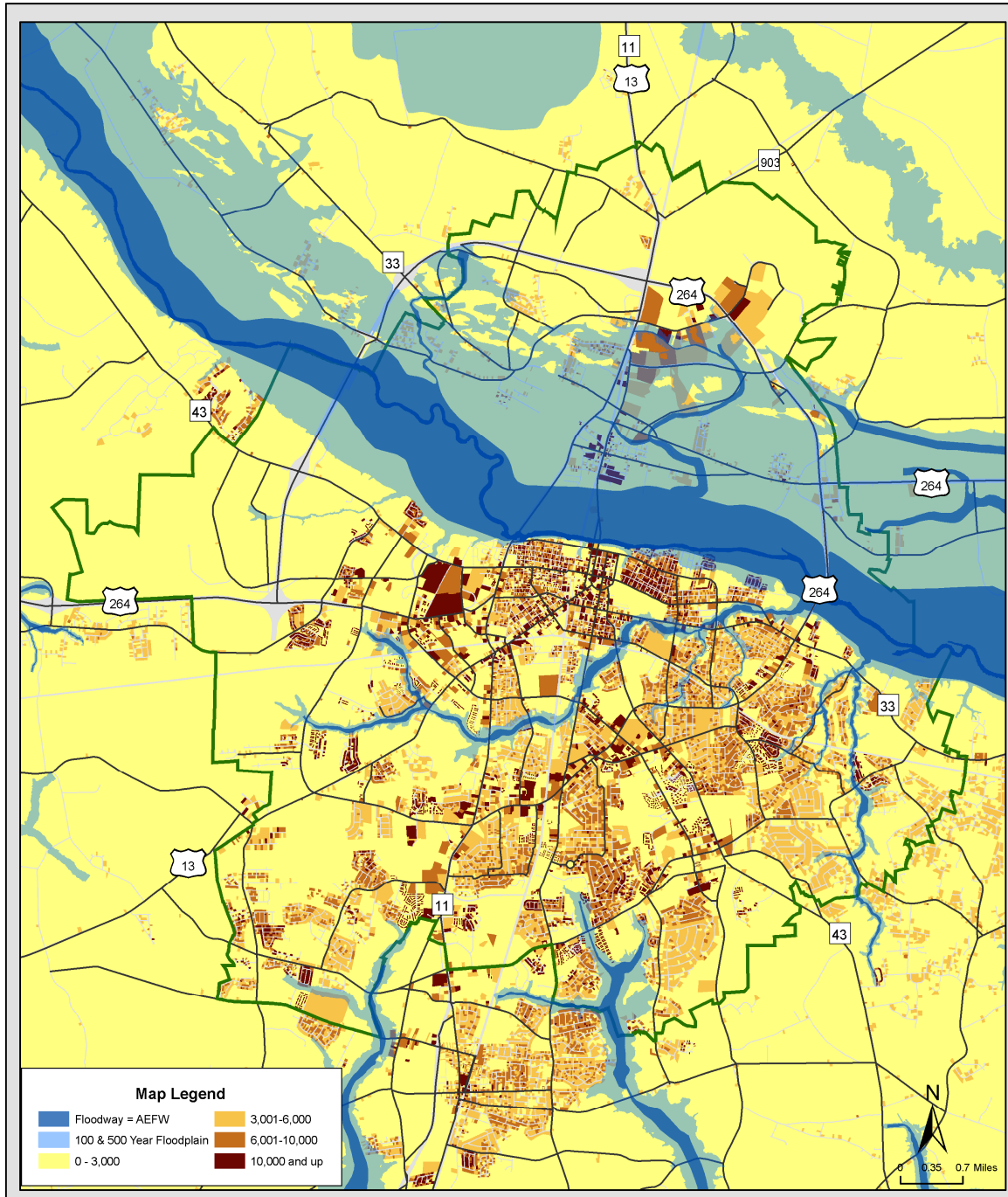


Map 11:
Multi-Family Residential Parcels Vulnerability:



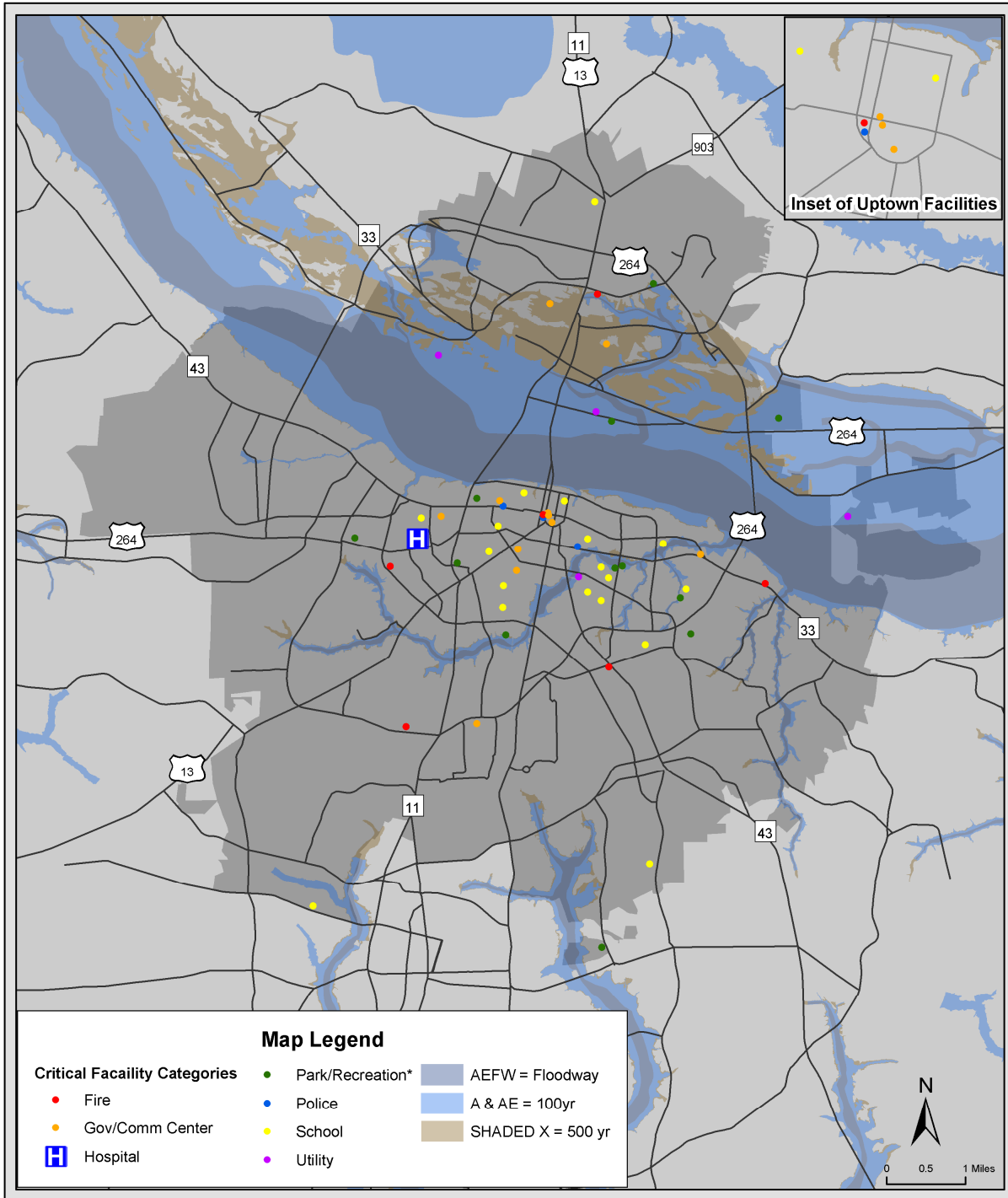


Map 12:
Building Density Vulnerability:





Map 13:
Critical Facilities





D. FUTURE VULNERABILITY

Future vulnerability is described as the extent to which people are expected to experience harm and property damage by a hazard event if projected development were to occur. Greenville’s future vulnerability will be determined by the land use pattern, and how Greenville continues to grow. It is crucial that this kind of planning encourages the citizen’s of Greenville to make smart land use decisions that will not increase Greenville’s vulnerability to natural hazards. For instance, it is crucial to discourage a significant density of development within the floodplain. The City of Greenville is one of the fastest growing municipalities in the State of North Carolina. , The City’s total jurisdiction consumes about 10% of the County’s total land area. Since 2000, reports from the Planning Department and Building Inspections indicate the following facts about Greenville:

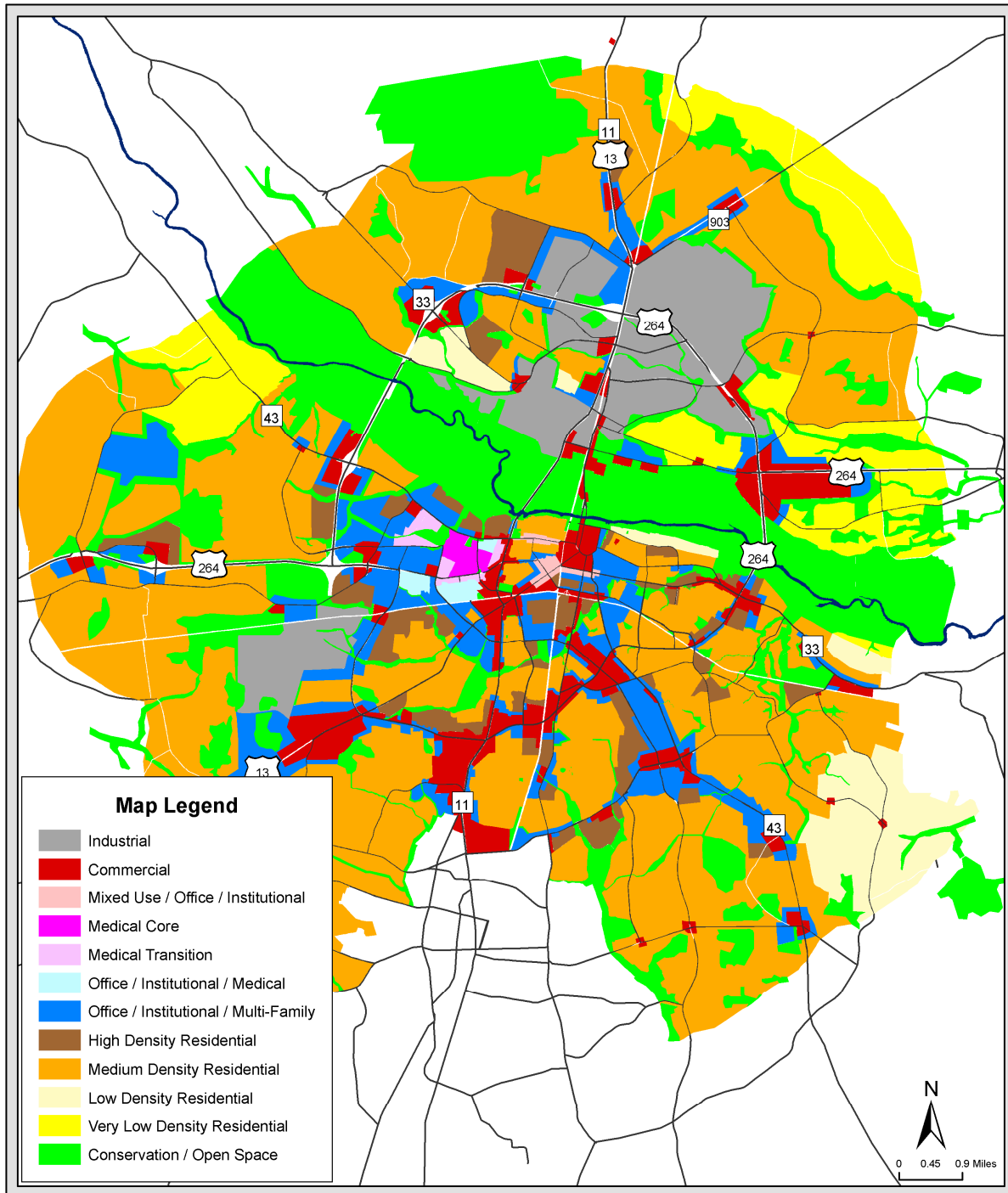
- According to 2000 Census data, the city of Greenville contained 28,145 total dwelling units, and 60,476 total residents. In 2010, the city contains about 43,000 dwelling units and over 80,000 (estimated) total residents.
- From 2000 through August of 2004, a total of 2,635 residential lots were approved for construction through the subdivision process, and a total of 1,896 multi-family dwelling units were approved. Total dwelling units approved in Greenville increased by just over 16% from 2000 to August of 2004.
- 1998 Building Data showed that 3,075 buildings were located within the floodplain, and 2003 shows that number decreased to 1,475.
- Building permit data from January 2000 to June 2004 yielded 104 new single-family homes, 170 mobile homes, 87 duplex and townhouse units, and a total of 102 multi-family units were developed in the floodplain. Between 2005 and 2009, a total of 6,657 building permits were issued for residential units (single-family, duplex, and multifamily).

The City of Greenville’s Comprehensive Plan, Horizons, describes the growth of Greenville and categorizes future land uses. Near the Tar River and its tributaries, future land use planning and zoning will play a key part in the future vulnerability to flooding. Most of these areas in the floodplain are planned for conservation/open space use, so future vulnerability would not increase at a rate comparative to the rest of the City. Maps 14, 15, and 16 portray the City’s Land Use Plan both within the entire jurisdiction and within the floodplain.

Planning of new roads and infrastructure will also be vulnerability to many disaster events in the future. Map 17 on page 69 shows proposed or potential street patterns based on the Thoroughfare Plan, and platted subdivision streets through 2010.



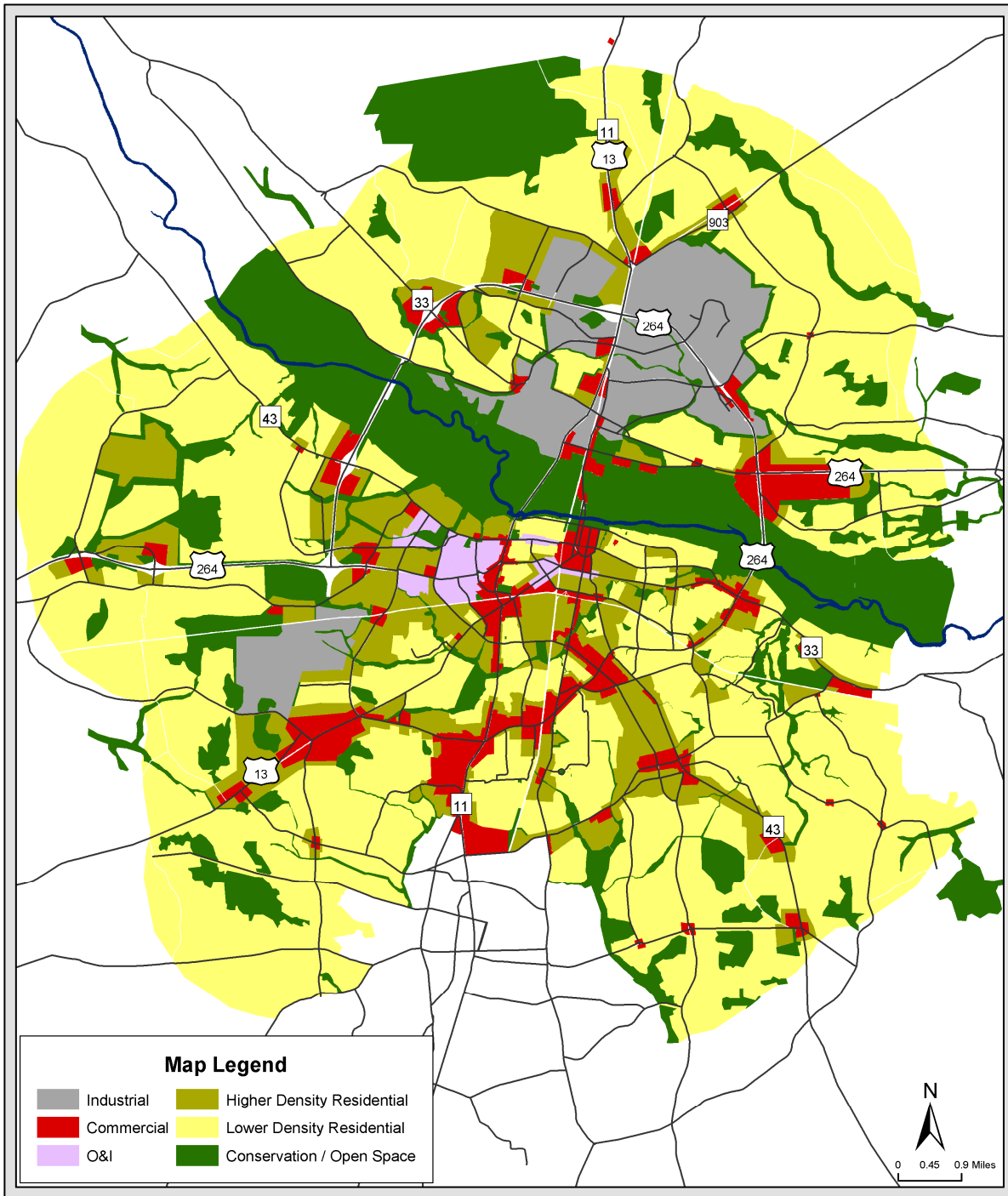
Map 14:
Horizons: Greenville's Community Plan Map





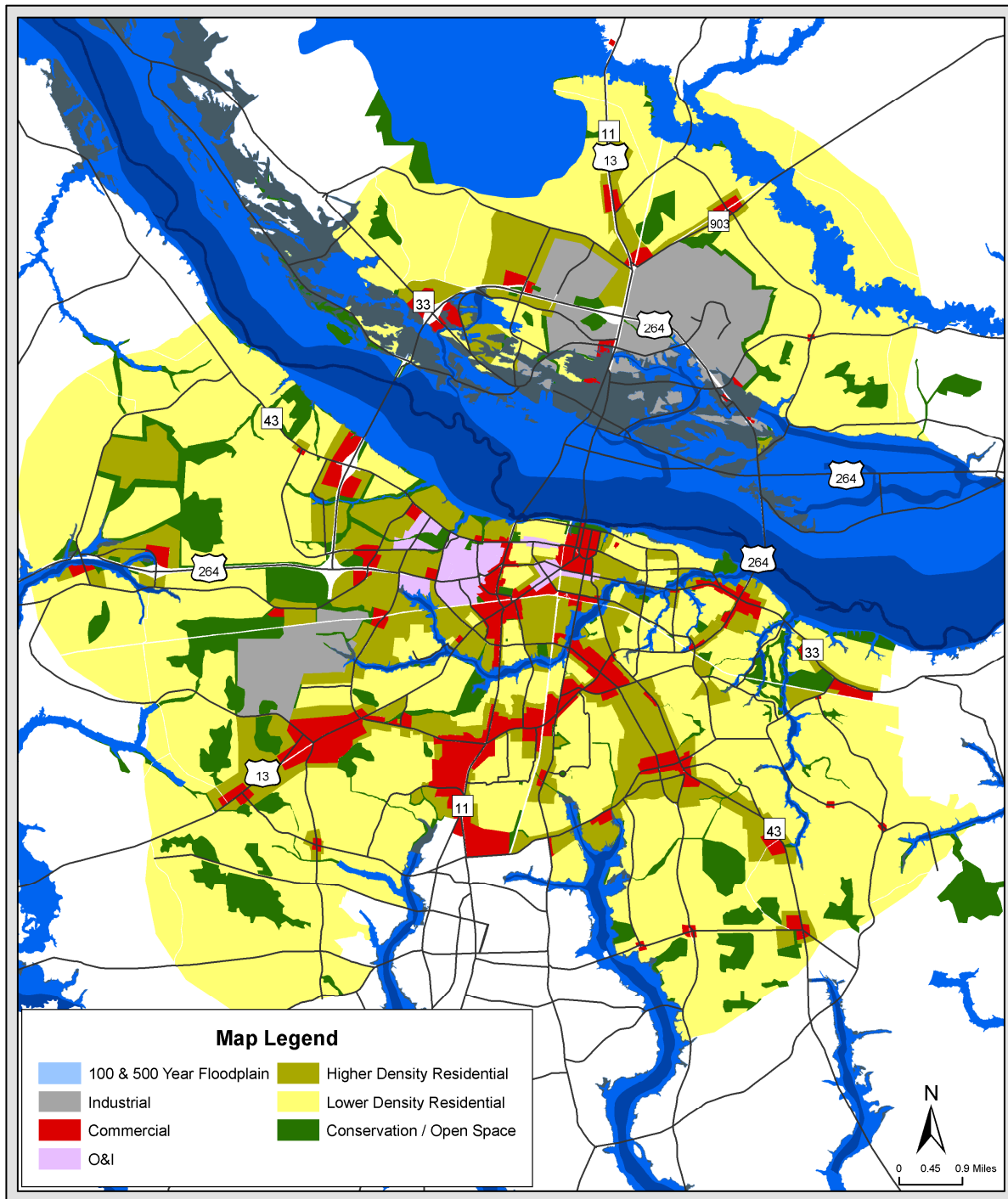
Map 15

Horizons: Greenville’s Community Plan Map (Simplified)



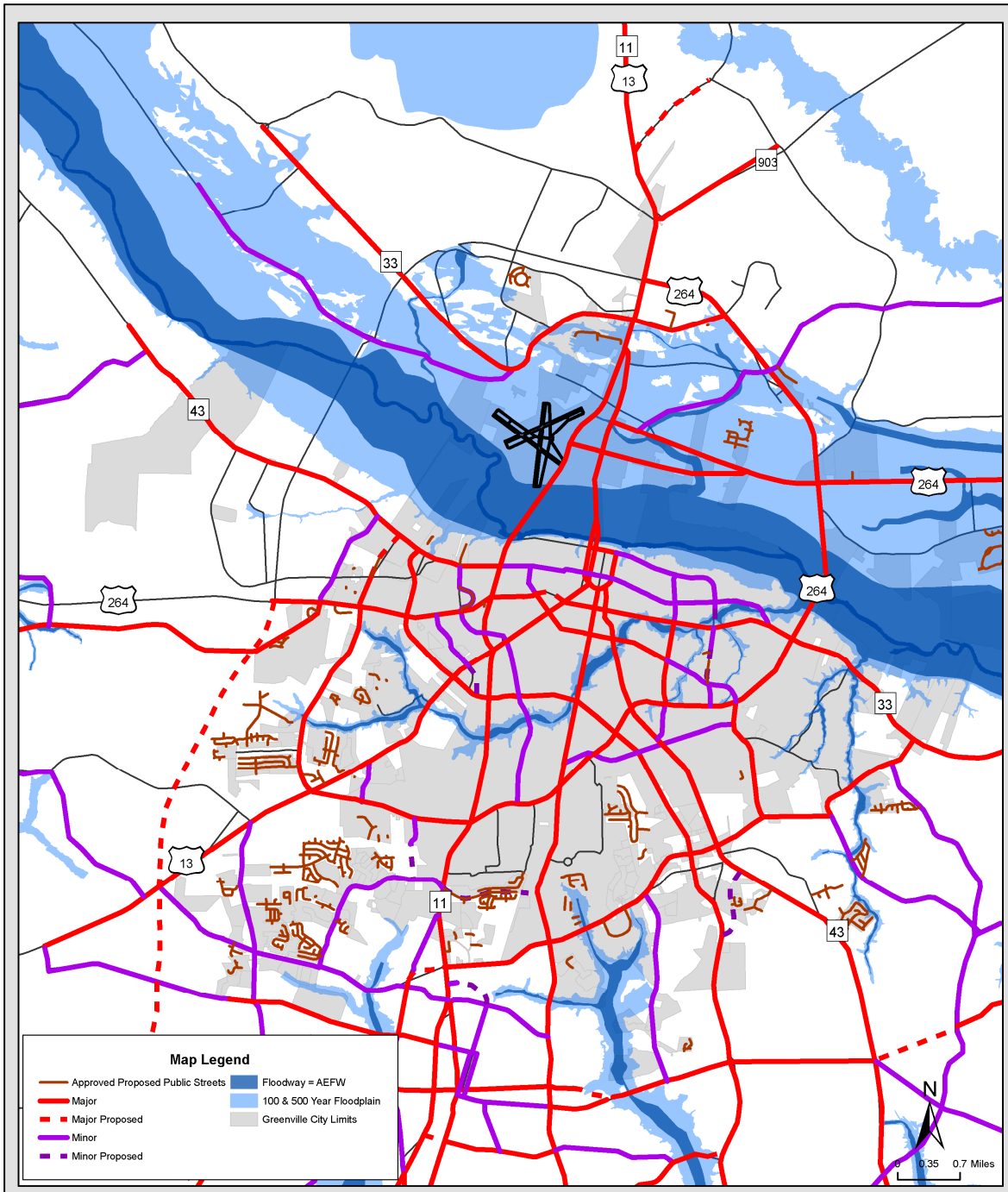


Map 16
Community Plan Map Simplified and Floodway/Floodplain





Map 17:
Proposed Thoroughfares & Subdivision Streets Map





In terms of population growth, the City of Greenville’s growth cannot be described based on a specific growth rate, therefore the Planning Department uses the flat-line method to determine future vulnerability of people. The following table describes Greenville’s projected growth from 2000 to 2029.

Table 17:
Greenville Population Analysis (Part II)

Year	Population	% change per year	Average annual% change per decade	Year	Population	% change per year	Average annual% change per decade	Year	Population	% change per year	Average annual% change per decade
2000	61,209	5.215	3.51933	2010	85,371	3.567	3.51933	2020	121,207	3.567	3.51933
2001	60,966	-0.4		2011	88,417	3.567		2021	125,530	3.567	
2002	63,444	4.065		2012	91,570	3.567		2022	130,008	3.567	
2003	65,799	3.712		2013	94,837	3.567		2023	134,645	3.567	
2004	68,687	4.389		2014	98,220	3.567		2024	139,448	3.567	
2005	69,312	0.910		2015	101,723	3.567		2025	144,422	3.567	
2006	72,052	3.953		2016	105,352	3.567		2026	149,574	3.567	
2007	76,280	5.868		2017	109,109	3.567		2027	154,909	3.567	
2008	79,629	4.390		2018	113,001	3.567		2028	160,435	3.567	
2009	82,431	3.519		2019	117,032	3.567		2029	166,157	3.567	

Data Source: North Carolina Office of State Budget and Management; North Carolina State Data Center

Years 2000 through 2008 are Estimates, certified by NC Office of State Budget and Management

Years 2009 and beyond are Projections, based on flat-line population growth of 3.567% per year
(% represents the average annual % change in population over a 20-year period from 1984-2003)

Method used to calculate projected population:
(Population in Year X) = (Population in Year X - 1) x (1.02866)

E. FUTURE VULNERABILITY: CRITICAL FACILITIES

Over the course of the City’s 20 year comprehensive planning horizon, the City of Greenville will plan for and implement several new projects that can be considered as critical facilities. Some facilities are unknown at this time, or may be known, but the location and value has not yet been identified. The Hazard Mitigation Plan has been updated to cover costs and locations of those projects that have been completed since 2004.



- ❖ **Fire Stations** – Station #6 on E. 10th Street was completed since this plan was last updated. In addition, the City has budgeted and purchased the land for Station #7, which will be located on the Fire Tower Road corridor (close to the historic fire tower). There are also plans to build Station #8 at the intersection of Davenport Farm Road and Frog Level Road, although the land has not yet been purchased.

- ❖ **City Hall Expansion / Municipal Service Relocation** – The historic Municipal Building (former City Hall) was renovated and expanded to accommodate staff offices (the Community Development Department and Code Enforcement Division). In addition, the new City Hall, which was completed in 2006, now houses much of the City’s executive, legislative, and administrative functions – City Manager’s Office, City Attorney, IT, Clerk, HR. The new City Hall has a current tax value of \$5.07 million, while the renovated Municipal Building is valued at \$2.35 million dollars.

- ❖ **New Schools / Expansion to existing schools** – Pitt County Board of Education approved Phase I of its long-range facilities plan in 2009. The plan includes construction of a new elementary school (\$16.1 million budget) at Briarcliff Drive/Allen Road; this project is currently under construction. The long-range plan also budgeted \$8.1 million for expansion of Eastern Elementary School. In April 2010, the board approved a \$5.4 million plan for reconfiguration and expansion of Sadie Saulter School, which would increase the physical size of the school from 41,728 square feet to 69,796 square feet; the reconfigured facility is scheduled to be online for the 2011 school year.

- ❖ **New Recreation Facilities** – The 2008 – 2020 Capital Improvements Plan budgeted \$27 million to renovate recreational facilities and parks. For 08 – 13 renovations, the plan budgeted \$1.2 million for the Drew Steele Center, \$5.7 million for South Greenville Recreational Center, and \$6.5 million for Eppes Recreation Center. The CIP also includes \$3 million to create a new park in a fast growing east Greenville, in the vicinity of Highway-33, as well as \$2 million to improve the greenway system.

- ❖ **New University Facilities** – Two major ECU projects, which were completed within the last five years, are now considered to be critical facilities. The West End Dining Hall was built on Reade Circle as part of the ECU main campus. The project was budgeted for \$13.7 million dollars. In 2003, the university completed the North Recreation Fields Complex, located north of the Tar River; portions of the complex are located within the floodplain.

As new facilities are completed, they will be incorporated into the existing critical facilities map and table, along with final associated project costs and/or property values.

END OF SECTION



MITIGATION STRATEGY

A. SUMMARY

Hazard mitigation reduces the loss of life and property from natural disasters and serves as an essential component in emergency management. After natural disasters, repairs and reconstruction are often completed in such a way as to simply restore damaged property to pre-disaster conditions. Replication of pre-disaster conditions results in a repetitive loss cycle of damage, reconstruction, and repeated damage. Hazard mitigation is needed to ensure that such cycles are broken, that post-disaster repairs and reconstruction take place after damages are analyzed, and that sounder, less vulnerable conditions are produced. The hazard mitigation plan required under Section 409 of Stafford Disaster Relief and Emergency Assistance Act (PL 93-288, as amended), is typically developed in a post-disaster situation; however, the plan developed after a disaster is essentially a pre-disaster plan for the next disaster. Hazard mitigation is the only phase of emergency management that can break the cycle of damage, reconstruction, and repeated damage.

In addition to the Stafford Act, there have been two Executive Orders dealing with flood losses. Executive Order 11988 is used by Federal Emergency Management Agency (FEMA) to deny disaster assistance in a repetitively flooded area. Instead, technical and financial resources of existing programs are used to help residents with relocation expenses and to prevent reoccupation of residential properties. The effect of this order is to mitigate future flood damages by encouraging residents to relocate.

Federal and state hazard mitigation officers limit federal and state investments in floodplains through Executive Order 11990. This order restricts the availability of Federal Housing Administration (FHA), and Veterans Housing Administration (VHA) low-interest loans to homebuyers, the availability of Small Business Administration loans for future development, and Department of Housing and Urban Development Community Development Block Grant funds. The effect is to reduce the financial incentive that encourages development in an identified flood hazard area.

Development of a hazard mitigation plan has the potential to not only restrict future development within flood hazard areas but also to ensure mitigation opportunities are not lost in the hasty effort to rebuild and recover from the next disaster. The intent of the hazard mitigation plan is to develop, over time, a disaster resistant community.

B. MITIGATION GOALS & OBJECTIVES

Goals are statements of desirable future conditions that are to be achieved. They are broad in scope and assist in setting community priorities. Objectives are more tangible and specific than goals. The following goals will provide the basis for the objectives, and corresponding implementation



strategies will be included in this plan, some of which are already being administered and implemented:

- Decrease the community’s vulnerability to future hazard events
 - Continue to update the City’s Emergency Operations Plan (last updated in July 2008 and scheduled to be updated again in 2013/14), and provide more strategies for City operations following a disaster. Ensure that the Emergency Operations Plan is aligned with the Hazard Mitigation plan
 - Preserve open space in floodplain and environmentally sensitive areas. Explore ways that the City of Greenville might acquire additional properties in flood-prone areas
 - Improve education and outreach to the community regarding flood hazards and flood mitigation, targeting areas that include properties in the repetitive losses inventory.
 - Improve education, awareness and outreach to the community regarding other hazards that would affect the entire jurisdiction. Improve coordination of existing public education resources pertaining natural hazard planning and mitigation
 - Revise the development standards in the Flood Damage Prevention Ordinance so that new single-family residential development (not just multifamily) must be elevated 2 feet above base flood elevation, making the standards consistent with Pitt County standards. Acquire and utilize North Carolina future conditions flood mapping, which requires communities to set development standards in the 500-year flood plain at 2 feet above base flood elevation
 - Ensure that the City has adequately trained staff to administer and enforce current ordinances and policies to protect the City and to decrease its vulnerability
 - Consider hiring an environmental planner for the City

- Reduce loss of life and personal injury from natural hazards
 - Ensure that critical facilities are operational immediately after the occurrence of a hazard
 - Ensure that emergency response is operational in accordance with a Level III emergency
 - Continue ongoing improvements of the emergency evacuation route identification system, including selection of additional sign locations that are visible and strategic. Post evacuation route map(s) on the City of Greenville website
 - Avoid subdivision development that is dependent on one or few streets that are susceptible to flooding. The City’s subdivision ordinance currently requires single-family residential subdivisions with 30+ units to provide two or more access points; consider requiring multifamily subdivisions to also provide two or more access points.
 - Continue to support subdivision design that promotes connectivity to existing collector streets and major thoroughfares, which has become an area of emphasis for City of Greenville departments that support planning and development activities. Continue to implement and, as necessary, refine the City’s special, more restrictive standards concerning terminal and loop streets. NC fire codes require sprinklers in dwellings on terminal streets (for 30+ dwellings) and restricts sites of single access subdivisions.
 - Strengthen the City’s existing stormwater control ordinances to require new residential development to provide 1-year flood ponds, instead of 10-year flood ponds. Ensure that development complies with all stormwater regulations



- Minimize the damage to public infrastructure resulting from natural hazards
 - Develop a plan for relocating public infrastructure out of flood hazard areas
- Maintain data in computer based format, upgrade the City’s GIS system, and upgrade and maintain information about hazards in the library collection
 - Access and maintain a better GIS system with utility data from the Greenville Utilities Commission. Note: GUC has been reluctant to share relevant data due to homeland security concerns
 - Continue to maintain floodplain elevation certificates in computer format, and link them to the GIS system
 - Enhance the City’s website to include information about Hazard Mitigation and the programs and policies it relates to
 - Maintain computer-based records in database format of all structures acquired or elevated through city-sponsored projects
 - Enhance the City’s current flood hazard library collection to include this plan as well as information on all types of natural disasters it references
- Minimize loss of personal and real property from natural hazards, and ensure the continued success of emergency operation procedures
 - Continue to update the City’s Emergency Management Plan, and provide more strategies for City operations following a disaster. Consider combining the Emergency Management Plan with the Hazard Mitigation plan, to make it tie in with mitigation strategies
 - Ensure that previously flooded or damaged properties are maintained as open space
 - Establish a list of priorities for acquisition of private properties in the event of a future disaster
 - Continue to support subdivision clustering to maximize density while preserving flood hazard areas
 - Continue to support Watershed Protection Ordinances, and consider establishing more watershed protection areas, if feasible
 - Consider increasing perennial stream buffer requirements and requiring buffers along all intermittent streams as well as perennial streams
- Manage future development so that vulnerability to natural hazards is not significantly increased
 - Consider study of an urban growth boundary to control Greenville’s sprawl
 - Delineate preferred growth areas away from the 100-year floodplain. Consider developing small area plan(s) to support development in urban fringe areas that are environmentally suitable for future growth
 - Continue supporting infill development in established areas that have a lower risk of being significantly damaged from a flood or other hazard event. The Center City – West Greenville Revitalization Plan was adopted in 2006. The City has been building affordable rental and for-sale infill housing in historic, urban core residential neighborhoods. The City recently adopted Urban Core Overlay District development



standards to better support mixed-use and downtown-oriented development. The City should look to recommit and/or bolster resources for implementing its urban core revitalization vision in the future

- Promote greenways, parks and recreation uses throughout the City, particularly along existing streams and in previously flooded areas utilizing flood buyout properties
- Continue recommending rezoning requests to consider using the Conservation Overlay Zoning District to ensure that vulnerable areas will never be developed

➤ Expedite post disaster reconstruction

- Develop a comprehensive post disaster recovery and reconstruction plan for the City
- Participate in the directives of the Pitt County Emergency Operations Plan (EOP)
- Continue to establish a flood recovery center when needed to address post disaster issues. Utilize existing staff and create temporary positions for the FRC. Utilize the environmental planner to direct the division
- Continue to seek funding from state sources such as the Hazard Mitigation Grant Program and the Housing Crisis Assistance Funds for housing and tenant relocation projects
- Ensure that critical facilities are located within reasonable locations. Consider developing new facilities where needed

➤ Protect the fragile natural and scenic areas located along the Tar River and its tributaries

- Consider establishing a tree preservation and protection ordinance that will address clear cutting and tree removal on private properties
- Ensure that stream buffers are undisturbed by development unless stormwater improvements are necessary, or walking trails based on the proposed greenway system can be established
- Ensure that the appropriate greenway trail types are used in areas where preservation of natural materials is encouraged

The goals and objectives identified above were developed during working meetings of the Flood Recovery Task Force and through consultations with the city's staff. The Hazard Mitigation Plan Team revisited these goals and objectives and expounded on them based on new requirements.

Mitigation goals can only be accomplished within the planning context of providing a sustainable environment that meets the needs of today while protecting the needs of future generations. Sustainable development and smart growth principles of land stewardship, protection of the natural environment, and preservation of natural resources have all been considered during the development of mitigation activities. The real challenge, however, has not and will not be the development of mitigation activities, but will come in the months and years ahead as the people and leaders of the City of Greenville convert the Hazard Mitigation Plan into action.

The remainder of this section will include the objectives and implementation strategies necessary to obtain the city's hazard mitigation goals and recommendations for plan monitoring, evaluation, and updating.



C. EXISTING MITIGATION STRATEGIES

The following provides a summary of projects, plans, and ordinances relevant to hazard mitigation that the city currently implements. The continued implementation of existing strategies is appropriate to meet the majority of the goals and objectives of this plan.

❖ **Flood Damage and Prevention Ordinance**

The City of Greenville participates in the National Flood Insurance Program (NFIP) and complies with all related regulatory requirements. The ordinance is enforced through requirements set forth by the city's zoning ordinance. In all areas of special flood hazard (100-year floodplain) identified by the Federal Emergency Management Agency in its Flood Insurance Rate Map (FIRM) the following provisions are required:

- ◆ All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure
- ◆ All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damages
- ◆ All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damages
- ◆ Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding
- ◆ All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system
- ◆ New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters
- ◆ On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding
- ◆ Any alteration, repair, reconstruction, or improvements to a structure, which is in compliance with the provisions of this ordinance, shall meet the requirements of "new construction" as contained in this ordinance

In areas designated as floodways, no encroachments, including fill, new construction, substantial improvements, and other developments shall be permitted unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in the flood levels during the occurrence of the base flood.



Following Hurricane Floyd in 1999, the City of Greenville modified its flood damage and prevention ordinance in February of 2000 to require that the minimum elevation of the lowest finished floor (FFE) of newly constructed and substantially reconstructed structures in the 100-year floodplain be increased from the base flood elevation of the 100-year flood event (BFE) to BFE plus one foot (BFE plus two feet for mobile homes). This ordinance was again changed in February of 2004 to state that structures built in the 100-year floodplain shall be constructed so their lowest finished floor elevation (FFE) is at or above the 500-year flood elevation level. This progressive policy change was implemented to ensure that sub-floor structures (e.g.: heating ducts, insulation, floor joists, etc.) are protected from flooding to the maximum degree reasonable. Other modifications to the flood damage and prevention ordinance include:

- Required skirting for mobile homes
- Required anchoring of propane tanks and decks associated with mobile homes
- Lowered the density of mobile home parks within the 100-year floodplain to 8 per acre for new or substantially redeveloped parks
- Required that new streets be constructed to no less than 1 foot below BFE

The Public Works Department is currently responsible for implementation of this ordinance. A Floodplain Development Administrator works out of the Engineering Division, and issues all elevation certificates for developments within the floodplain.

Goals and Objectives met:

- Decrease the Community’s vulnerability to future hazard events
 - Revise the development standards in the Flood Damage Prevention Ordinance so that new single-family residential development (not just multifamily) must be elevated 2 feet above base flood elevation, making the standards consistent with Pitt County standards. Acquire and utilize North Carolina future conditions flood mapping, which requires communities to set development standards in the 500-year flood plain at 2 feet above base flood elevation
 - Ensure that the City has adequately trained staff to administer and enforce current ordinances and policies to protect the City and to decrease its vulnerability
 - Consider hiring an environmental planner

❖ Community Rating System

Administered by FEMA, the Community Rating System (CRS) provides flood insurance discounts for residents in NFIP communities that undertake floodplain mitigation activities above the minimum NFIP standards. The City of Greenville participates in the CRS and maintains a Class 9 rating. Participation is voluntary and does require additional mitigation requirements beyond those required by the NFIP. It is the City's intention to lower its CRS rating to a Class 8 through the preparation of this hazard mitigation plan and continued commitment toward reducing the vulnerability of the city



to natural hazards. Computer-based files should be available and requested when the City applies for this reclassification.

Goals and Objectives met:

- Decrease the Community’s vulnerability to future hazard events
 - Improve education and outreach to the community regarding flood hazards and flood mitigation, **targeting areas that include properties in the repetitive losses inventory.**

❖ **Minimum Housing Code**

Pursuant to N.C.G.S. 160A-441, the City of Greenville has adopted a minimum housing code. The code regulates housing which has been found to be unfit for human habitation due to dilapidation; defects increasing the hazards of fire, accident, or other calamities; lack of ventilation, light, and sanitary facilities; and other conditions which may render a dwelling unit unfit for occupancy. The City of Greenville actively enforces its minimum housing code. Several dilapidated structures located in flood hazard areas have been acquired by the city and cleared through code enforcement.

Goals and Objectives met:

- Decrease the Community’s vulnerability to future hazard events
 - Ensure that the City has enough staff to administer and enforce current ordinances and policies to protect the City and to decrease it’s vulnerability

❖ **Comprehensive Plan**

The City of Greenville’s Community Plan is known as Horizons, and serves as a policy guide to coordinate the development of land to serve in the public’s best interest. Comprehensive plans provide a legal basis for decision making pursuant to Article 19, Chapter 160A-383 of the North Carolina General Statutes, which states that land use and zoning decisions shall be made in accordance with a comprehensive plan. Comprehensive plans affect decision making in such elements as community values, environmental protection, transportation efficiency, quality of housing and development, and sustainability of growth. Additionally, comprehensive plans are used by the public to obtain key facts about cities, to guide decision making to benefit the greater good of all the community’s people, and to implement standards to sustain and improve the quality of life. The City of Greenville has had land use laws in place for over 50 years. The first attempt at a comprehensive plan was written in 1967, and known as The Land-Use Development Plan for the City of Greenville, NC. During the 1970’s and 1980’s, Greenville experienced unprecedented growth. Recognizing the need for a long-range plan to guide development decisions, City officials began work on the first version of Horizons in 1980, which was adopted by City Council in 1981. The purpose of this plan



was to establish goals and policies regarding physical growth issues including water and sewer improvements, transportation, annexation, and future land uses for developing areas. While the 1981 plan served the City well for a number of years, the plan became severely outdated. In June of 1989, Greenville’s Planning and Zoning Commission appointed a 15-member citizen committee to update the City’s 1981 plan. This committee worked on the update for two years and created several key sub-issues within the newly revised 1992 Horizons Comprehensive Plan. In 1997, the Horizons Plan was updated once again with the addition of a future land use map. Additionally, this update began to focus on more critical issues such as preserving open space, protecting watershed areas, avoiding strip commercial development, protecting and preserving areas for greenways, maintaining strict floodway and floodplain regulation, preserving historic properties, preserving the character of existing and established neighborhoods, promoting interconnectivity of residential neighborhoods, and the encouragement of infill and mixed use developments. Another update of the Horizons Plan started in 2002. New goals were in mind for this update, and a Comprehensive Plan Committee was formed, which met for two years to discuss these goals. This plan, which is the current plan for the City was adopted in February of 2004. It is divided into the following sections:

◆ Future Land Use

This section of the plan is intended to focus on the Principles of Urban Form such as paths, nodes, landmarks, edges, and districts; the Principles of Smart Growth, such as mixing of uses, human-scale design, and transportation options; the location of specific land uses such as commercial, residential, industrial, institutional, conservation/open space, etc.; and a separation of “vision” areas for the City.

A new future land use map was created emphasizing major changes in the City’s expected land use pattern. One key change, for example, is the addition of a significant amount of land designated for conservation/open space use. This concept takes a major step towards positive mitigation planning and will be discussed later in this plan as a mitigation strategy that Greenville will continue to implement.

◆ Plan Elements

This section of the plan examines various forces and functions that shape Greenville’s development, and establishes goals, objectives and policy statements to guide future decision-making in each area. They include housing, mobility/transportation, economic development, environmental quality, recreation and parks, utilities, community facilities, community character, and urban form and land use.

Some specific elements as they relate to this plan are identified in the recreation and parks section, and the policies on environmental quality. For example, it is an objective that the City promote more efficient use of open space and also preserve



areas within floodplains as natural riparian buffers, and prevent more development within these areas that are susceptible to hazard events such as flooding.

◆ Plan Implementation

Implementation strategies and policy statements are major objectives of the Horizons plan. Specific implementing actions address land development and growth management issues, which become common sources when Planning and Zoning Commission or the City Council considers changing the zoning, adoption of a plan or policy, or a subdivision plat or site plan review. It is in this section where specific “vision” areas are given implementing actions and priorities such as growth occurs to plan for the overall sustainability of Greenville. Other plans and programs, such as the Hazard Mitigation Grant program are referenced in this plan as an implementation action, much like identifying mitigation actions and goals and objectives as part of this plan.

Goals and Objectives met:

- Decrease the Community’s vulnerability to future hazard events
 - Preserve open space in floodplain and environmentally sensitive areas. Explore ways that the City of Greenville might acquire additional properties in flood-prone areas Ensure that the City has adequately trained staff to administer and enforce current ordinances and policies to protect the City and to decrease its vulnerability
- Minimize the damage to public infrastructure resulting from natural hazards
 - Avoid subdivision development that is dependent on one or few streets that are susceptible to flooding. The City’s subdivision ordinance currently requires single-family residential subdivisions with 30+ units to provide two or more access points; consider requiring multifamily subdivisions to also provide two or more access points.
 - Continue to support subdivision design that promotes connectivity to existing collector streets and major thoroughfares, which has become an area of emphasis for City of Greenville departments that support planning and development activities. Continue to implement and, as necessary, refine the City’s special, more restrictive standards concerning terminal and loop streets. NC fire codes require sprinklers in dwellings on terminal streets (for 30+ dwellings) and restricts sites of single access subdivisions.
- Minimize loss of personal and real property from natural hazards
 - Ensure that previously flooded or damaged properties are maintained as open space
 - Continue to support subdivision clustering to maximize density while preserving flood hazard areas



- Manage future development so that vulnerability to natural hazards is not significantly increased
 - Consider study of an urban growth boundary to control Greenville’s sprawl
 - Delineate preferred growth areas away from the 100-year floodplain. Consider developing small area plan(s) to support development in urban fringe areas that are environmentally suitable for future growth
 - Support infill development in established areas that have a lower risk of being significantly damaged from a flood or other disaster
 - Promote greenways, parks and recreation uses throughout the City, particularly along existing streams and in previously flooded areas utilizing flood buyout properties
 - Recommend rezoning requests to consider using the Conservation Overlay Zoning District to ensure that vulnerable areas will never be developed

❖ 2004 Greenway Master Plan

The 2004 Greenway Master Plan was adopted by the Greenville City Council on March 11, 2004 and has been designed to: 1) Re-evaluate the feasibility of the greenway corridor proposals found in the original plan, ensuring that they continue to be viable routes. 2) Offer alternatives for those corridors found to be no longer feasible. 3) Present new corridors that can provide opportunities in previously underserved areas of the community and can meet additional recreation, transportation, and natural area protection needs. In the system recommendations section, 42 maps have been included for each existing and proposed corridors and a detailed timeline of when land acquisition, master corridor planning, and construction steps should occur so that the development of Greenville's greenway system becomes a steady, measurable project over the following decades.

In addition to the detailed actions associated with each phase, there is an implementation chapter set up to get the greenway implementation process started. For the most part, the original 1991 greenway alignments remain viable proposals today. The system design is centered on a set of primary greenways along creeks and rivers. Connectors for bicycle and pedestrian traffic are then added to link the primary corridors to each other and to shopping, business, residential, education, and recreation destinations. Map 16 on the next page details the proposed greenway system.

The 2004 Greenway Master Plan also includes a funding chapter to help the community think through local strategies for raising capital, look for matching funds from other private and public sources, and help calculate the cost differences that might come from different trail designs and surfaces. Greenville has a significant history of greenway planning and the citizens have consistently shown broad support for the concept of “putting the green back in Greenville” through the development of a comprehensive network of greenways. In general, citizens favor using existing tax dollars or other local government money for this sort of activity and they see greenways as an important tool in shaping the land use patterns in the community, providing additional transportation opportunities, protecting water quality and natural areas and, in the end, improving the



quality of life for individuals living and working in Greenville. The implementation of a comprehensive greenways program in Greenville promises many benefits including enhanced water quality protection; preservation of critical wildlife habitat and green spaces; additional recreation, fitness, and education possibilities; and enhanced alternative transportation options for pedestrians and cyclists. All of these contribute to elevating the general quality of life in Greenville - increasing its appeal as a tourist destination, new business location, and thriving community where one might raise a family. In the end, investments in quality of life components yield a return to the bottom line of City and personal finances by increasing property values and subsequently increasing the City's tax base.

Goals and Objectives met:

- Manage future development so that vulnerability to natural hazards is not significantly increased
 - Promote greenways, parks and recreation uses throughout the City, particularly along existing streams and in previously flooded areas utilizing flood buyout properties or other city-owned properties
- Protect the fragile natural and scenic areas located along the Tar River and its tributaries
 - Ensure that stream buffers are undisturbed by development unless stormwater improvements are necessary, or walking trails based on the proposed greenway system can be established
 - Ensure that the appropriate greenway trail types are used in areas where preservation of natural materials is encouraged

❖ **Tar River Floodplain Redevelopment Plan**

Shortly after Hurricane Floyd swept through Greenville, a land use recovery plan was drafted for areas adjacent to the Tar River. The purpose of this plan is to guide the future development of land within these areas to prevent or minimize possible future effects of flooding on the properties. While this may be considered a primary goal in the way of public safety and stability, other factors must be taken into account when developing a long-range vision of the area. It is the intent of the City to ensure this area retains a sense of community with safe neighborhoods and a viable economy created through compatible mixtures of land uses.

This plan also includes a housing recovery section of the specific census tracts that were impacted, and creates an analysis of the reconstruction process to follow after Hurricane Floyd. The Tar River Floodplain Redevelopment Plan will work hand in hand with other documents such as the Comprehensive Plan, the Flood Land Reuse Plan, and this plan to ensure that flood hazard areas are protected from future vulnerability.



Goals and Objectives met:

- Minimize loss of personal and real property from natural hazards
 - Ensure that previously flooded or damaged properties are maintained as open space
- Manage future development so that vulnerability to natural hazards is not significantly increased
 - Promote greenways, parks and recreation uses throughout the City, particularly along existing streams and in previously flooded areas utilizing flood buyout properties
- Protect the fragile natural and scenic areas located along the Tar River and its tributaries
 - Ensure that stream buffers are undisturbed by development unless stormwater improvements are necessary, or walking trails based on the proposed greenway system can be established
 - Ensure that the appropriate greenway trail types are used in areas where preservation of natural materials is encouraged

❖ Flood Land Reuse Plan

The City of Greenville adopted a Comprehensive Flood Land Reuse Plan on January 8, 2004, which serves the following purposes:

- ◆ To inventory properties that the City of Greenville acquired under the Hazard Mitigation Grant Program as a result of flooding from Hurricane Floyd
- ◆ To identify potential reuses in accordance with buyout property restrictions of the Federal Emergency Management Agency (FEMA), which will benefit the City and general public
- ◆ To offer guidance to the City of Greenville and its citizens on proper reuse and maintenance of these properties to ensure a much lower threat of flood destruction in the future

In determining how to use the acquired properties, the City appointed a team of staff members from the departments that will be most closely involved with the overall process. This committee included representatives from Planning and Community Development, Public Works and Recreation and Parks. It was the role of this team to assess the inventory of acquired properties and determine recommendations for their use in a fashion compliant with the restrictions placed on the properties by FEMA. The plan was presented to the public through public meetings and open houses. The meetings were held at locations on both sides of the Tar River in an effort to make the meetings accessible to the greatest number of people. Additionally, the Greenville



Utilities Commission was given opportunity to comment and offer suggestions for reuses that may meet their needs.

Once the properties were acquired, the issue became how to use the properties in a manner beneficial to the citizens of Greenville and at the same time safe from future flooding or storm events. This was largely determined by the restrictions placed on future use of these properties through their purchase under the HMGP buyout process, which were also placed on the deed at the time of acquisition. The following summarizes some of these restrictions:

- ◆ The property must be dedicated and maintained in perpetuity for uses compatible with open space, recreation, or wetlands management (Allowable open space, recreational, and wetland management uses including parks for outdoor recreational activities, nature reserves, cultivation, grazing, camping (except where adequate warning time is not available to allow evacuation), temporary storage in the open of wheeled vehicles which are easily movable (except mobile homes), unimproved, permeable parking lots and buffer zones. Allowable uses generally do not include walled buildings, flood reduction levees, or other uses that obstruct the natural and beneficial functions of the floodplain)
- ◆ No new structure(s) will be built on the property except those compatible with open space, recreation, or wetland management usage set forth by FEMA
- ◆ Any structure built on the property must be located to minimize the potential for flood damage, be flood-proofed, or elevated to the Base Flood Elevation plus one foot of freeboard

Reuse of the acquired properties must be in conformance with these restrictions. The restrictions are applicable to the City and to any parties that the City may elect to lease buyout property.

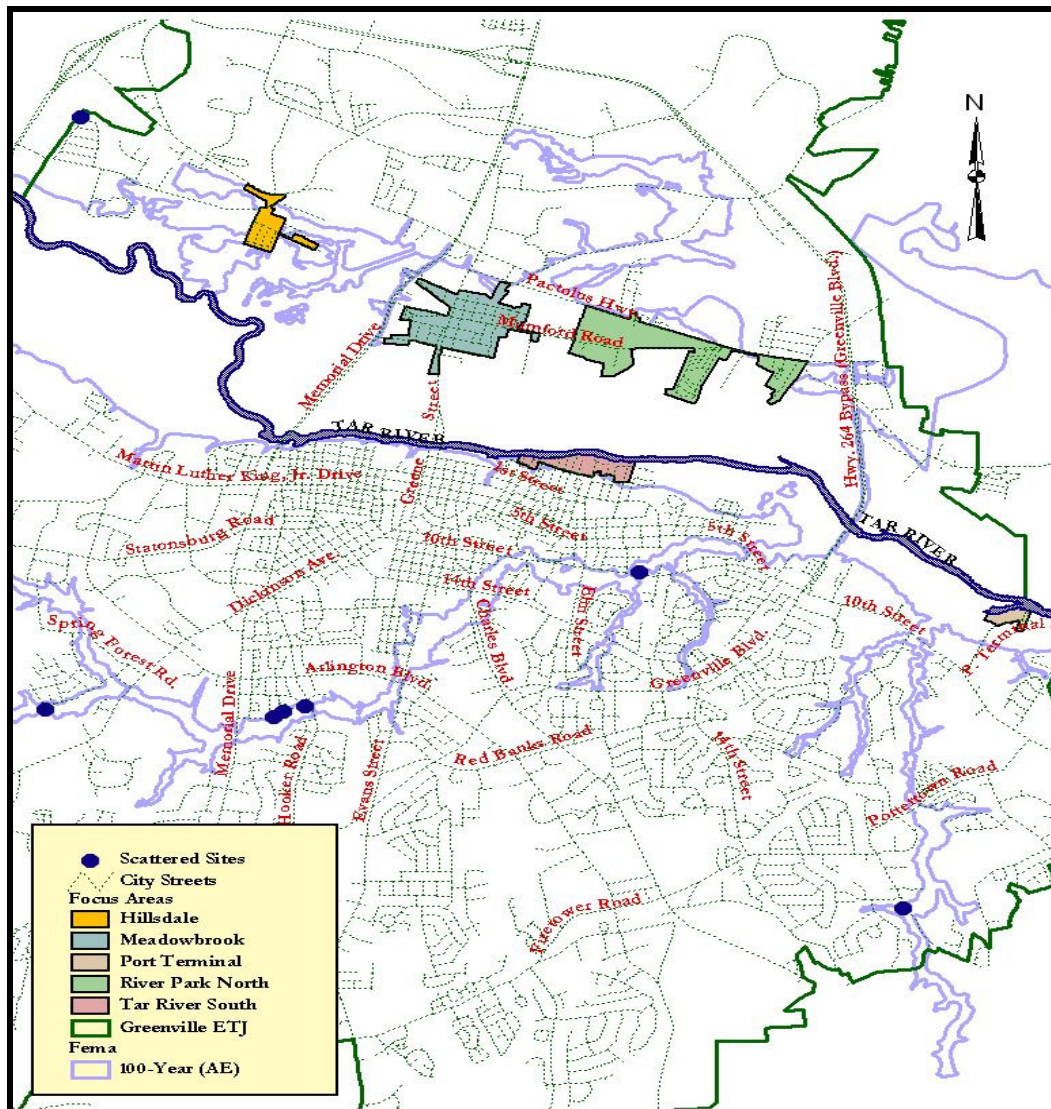
The reuse areas were divided into four individual “cluster” locations and a fifth category that is best defined as scattered sites. Areas having a collection of acquired properties within the same general geographic area determined the locations. A summary of the number of properties and acreage figures for each location is provided in Table 18.

Table 18:
Flood Land Reuse Locations

Flood Reuse Location	Total Properties*	% of Total Buyouts	Total Acreage
River Park North	34	12.7%	76.3
Meadowbrook/Hillsdale	174	64.9%	51.9
Tar River South	49	18.3%	23.3
Port Terminal	4	1.5%	5.0
Scattered Properties	7	2.6%	4.6
Total	268	100.0%	161.1

The Flood Land Reuse Plan is intended to offer guidance to the City and the public on proper reuse of the numerous properties acquired through the buyout program as part of the recovery efforts resulting from extensive flooding. As a part of the program, significant restrictions are imposed on the reuse of the properties to ensure a much lower threat of destruction should another similar event occur in the future. However, this still leaves the City with a number of options for the reuse of the land, including parks, greenways, open space, etc. Additionally, it also provides opportunities for uses that can help meet the City’s needs, such as space for the cultivation of plant material to be used in City projects.

MAP 15:
Flood Land Reuse Focus Area:



While the City has several options on how to reuse the property, it may also choose to lease a significant portion of the property to private individuals who have a need for



additional space for gardening, cultivation, playfields, or other uses compatible with the goals of the disaster prevention program.

Goals and Objectives met:

- Decrease the community’s vulnerability to future hazard events
 - Preserve open space in floodplain and environmentally sensitive areas. Explore ways that the City of Greenville might acquire additional properties in flood-prone areas
- Minimize loss of personal and real property from natural hazards
 - Ensure that previously flooded or damaged properties are maintained as open space
 - Establish a list of priorities for acquisition of private properties in the event of a future disaster
- Manage future development so that vulnerability to natural hazards is not significantly increased
 - Promote greenways, parks and recreation uses throughout the City, particularly along existing streams and in previously flooded areas utilizing flood buyout properties

❖ **Recreation and Parks Comprehensive Master Plan 2000-2020**

The Greenville Recreation and Parks Comprehensive Master Plan is a twenty-year comprehensive plan that contains an analysis of the existing park system in the City of Greenville, identifies the park and recreation needs of the community, and identifies new sites for parks and additional recreational opportunities to the citizens of Greenville based on growth and Greenville’s change in character over time.

The Recreation and Parks Comprehensive Master Plan contains similar objectives as the Greenway Master Plan. Together, these documents go a long way in recommending the preservation of open space and maintaining the character of Greenville’s green areas, in addition to providing quality recreational opportunities.

The City of Greenville currently contains 32 existing recreation and parks facilities, which consume over 1,000 acres. Many of these sites have portions of land within the floodplain. By 2020, the City has plans to acquire properties for park land and recreation needs based on the growing population. These needs are provided as mini parks, neighborhood parks, community parks, sport complexes, regional parks, greenways, school parks, and special use facilities.



Goals and Objectives met:

- Decrease the community’s vulnerability to future hazard events
 - Preserve open space in floodplain and environmentally sensitive areas. Explore ways that the City of Greenville might acquire additional properties in flood-prone areas
- Minimize loss of personal and real property from natural hazards
 - Ensure that previously flooded or damaged properties are maintained as open space
- Manage future development so that vulnerability to natural hazards is not significantly increased
 - Promote greenways, parks and recreation uses throughout the City, particularly along existing streams and in previously flooded areas utilizing flood buyout properties

❖ **Emergency Management Plan**

The City of Greenville currently has a plan for emergency operations in the instance of a disaster already in place. The plan was previously adopted in December of 1984 shortly after the devastation of the Carolina Tornado Outbreak. The current EOP was updated in July 2008. The plan is designed to cover natural and man-made disasters, and details the responsibilities of City staff following an emergency situation. This plan contains 4 levels of emergencies and assigns the roles of departments during and after a disaster has occurred depending on the level of the disaster. It is expected that this plan will be updated in the future in coordination with future reviews and updates of the Hazard Mitigation Plan.

Goals and Objectives met:

- Decrease the Community’s vulnerability to future hazard events
 - Continue to update the City’s Emergency Operations Plan (last updated in July 2008 and scheduled to be updated again in 2013/14), and provide more strategies for City operations following a disaster. Ensure that the Emergency Operations Plan is aligned with the Hazard Mitigation plan. Ensure that the City has enough staff to administer and enforce current ordinances and policies to protect the City and to decrease its vulnerability.

❖ **Flood Information Library**

The City maintains a referenced section in the Sheppard Memorial Library, which provides literature on flood hazards and damage prevention. The Public Works



Department is responsible for implementation and information on the flood information library.

Goals and Objectives met:

- Decrease the community’s vulnerability to future hazard events
 - Improve education and outreach to the community regarding flood hazards and flood mitigation, targeting areas that include properties in the repetitive losses inventory.

❖ **Spatial Data Explorer/Q3 Flood Data Online**

The City maintains a web page that depicts the location of each parcel in the City and its extraterritorial jurisdiction (ETJ) relative to the 100 and 500-year floodplains, based on FEMA floodplain data (called “Q3” data). This information allows citizens, public policy makers, realtors and other interested parties to make informed decisions about land use, based on flood hazard risk. Public Works and the Planning Department work hand-in-hand on implementation of Q3 data.

Goals and Objectives met:

- Decrease the community’s vulnerability to future hazard events
 - Improve education and outreach to the community regarding flood hazards and flood mitigation, targeting areas that include properties in the repetitive losses inventory.
- Maintain data in computer-based format, upgrade the City’s GIS system, and upgrade and maintain information about hazards in the library collection
 - Maintain computer-based records in database format of all structures acquired or elevated through city sponsored projects

❖ **Special Needs Database**

Established to maintain a database of persons with disabilities, those needing special medication and/or medical care, and of Spanish speaking head of households and ensure that the pre-disaster (i.e.: evacuation) and post-disaster (i.e.: recovery) needs are met through the following actions:

- A) Provision of Spanish language resources at Sheppard Library, City Hall, at the Housing Counselor’s Offices, and at community based organizations and commercial enterprises that support the Latino community
- B) Maintain a database of volunteer translators to assist Spanish speaking citizens with the recovery process



- C) Identify bilingual City employees and ensure that they are available to assist in translating for Spanish speaking citizens who have recovery related issues with the City
- D) Work with the local cable television provider to ensure that a Spanish-language cable station is provided, so that it can be used during the aftermath of disasters to communicate with the Spanish-speaking population
- E) Develop a detailed contingency plan to coordinate the effective evacuation of persons with disabilities and those needing special medication and/or medical treatment through the Greenville Police and/or Fire Departments

Goals and Objectives met:

- Decrease the community’s vulnerability to future hazard events
 - Improve education and outreach to the community regarding flood hazards and flood mitigation, targeting areas that include properties in the repetitive losses inventory.
 - Improve education, awareness and outreach to the community regarding other hazards that would affect the entire jurisdiction. Improve coordination of existing public education resources pertaining natural hazard planning and mitigation

❖ Water Supply Watershed Overlay District

Pursuant to State law of the North Carolina Department of Environment and Natural Resources (NCDENR), the City administers an overlay zoning district which limits density in areas upstream of water supply intake. This overlay district is implemented by the Planning Department primarily to ensure the quality of the City’s (and its neighbors) drinking water supply. This overlay district also has the effect of limiting the amount of development in some areas of the Tar River floodplain.

Goals and Objectives met:

- Minimize loss of personal and real property from natural hazards. City adopted elicited discharge program, which prohibits unapproved substances in SW conveyance.
 - Continue to support Watershed Protection Ordinances, and consider establishing more watershed protection areas, if feasible

❖ Tree Planting and Protection Ordinance

Chapter 5 of the Greenville City Code regulates the planting, maintenance, and removal of trees and shrubs on public lands, encourages the protection of existing trees within the City, and established arboricultural standards and practices for tree protection in the City. This program covers all City owned and maintained properties. Whereas land covered with trees, rather than grass alone or pervious surfaces, allows less surface runoff, this effective program of tree planting and maintenance ensures reduced runoff



from public and publicly maintained areas. The City Arborist implements this ordinance.

Goals and Objectives met:

- Protect the fragile natural and scenic areas located along the Tar River and its tributaries
 - Continue to support tree planting and protection ordinances, and encourage tree preservation

❖ **Stormwater Management Program**

Through its Storm Drainage Ordinance (9-9), Subdivision Ordinance (9-5), and Manual of Standard Designs and Details, the City requires specific design standards for managing stormwater runoff from developed sites in the City and ETJ. These policies are highly effective for mitigating impacts of localized flooding due to development. The City’s Stormwater Management Program, specifically is implemented and administered by the Public Works Department. The detailed regulations of this program apply only to the areas of the City that are located within the Tar-Pamlico River Basin. The City of Greenville has been identified as an National Pollutant Discharge Elimination System (NPDES) Phase II community, meaning that Phase II requirements will be enforced within the river basin include limiting impervious cover and enforcing riparian buffer rules. The City of Greenville Public Works Department mails a riparian buffer brochure to all property owners (approximately 7,500 total) adjacent to potential “waters of state” (blue line streams). The program objective is to improve the water quality of stormwater runoff that enters the natural waters located in and outside of the City of Greenville.

Goals and Objectives met:

- Decrease the community’s vulnerability to future hazard events
 - Preserve open space in floodplain and environmentally sensitive areas. Explore ways that the City of Greenville might acquire additional properties in flood-prone areas
- Minimize loss of personal and real property from natural hazards
 - Continue to support subdivision clustering to maximize density while preserving flood hazard areas
- Minimize the damage to public infrastructure resulting from natural hazards
 - Strengthen the City’s existing stormwater control ordinances to require new residential development to provide 1-year flood ponds, instead of 10-year flood ponds. Ensure that development complies with all stormwater regulations



- Protect the fragile natural and scenic areas located along the Tar River and its tributaries
 - Ensure that stream buffers are undisturbed by development unless stormwater improvements are necessary, or walking trails based on the proposed greenway system can be established

D. FUTURE IMPLEMENTATION STRATEGIES

The following are proposed implementation strategies in addition to the existing strategies established to meet the goals and objectives of this plan:

❖ **Comprehensive Infrastructure Plan**

The City of Greenville shall work with the Greenville Utilities Commission to locate and map all utility functions and provide coverages within the City’s Geographic Information System Database. The GIS Manager for the City shall work with the GIS coordinator of the GUC to create this data. This includes finding all necessary easements recorded. Greenville Utilities Commission shall also work with the City on the location of its utilities within the floodplain. The infrastructure plan shall also provide an objective for disaster recovery.

Goals and Objectives met:

- Minimize the damage to public infrastructure resulting from natural hazards
 - Access and maintain a better GIS system with utility data from the Greenville Utilities Commission. Note: GUC has been reluctant to share relevant data due to homeland security concerns
 - Develop a plan for relocating public infrastructure out of flood hazard areas

❖ **Required Open Space Ordinance**

As part of the Zoning, Subdivision and Flood Damage Prevention Ordinances, the City shall establish regulations that require dedicated open space as part of a medium or high-density development. Dedicated open space will depend on the size of the development. Such open space should consist of environmentally sensitive and flood prone areas for the most part, but also useable recreation space.

Goals and Objectives met:

- Decrease the community’s vulnerability to future hazard events
 - Preserve open space in floodplain and environmentally sensitive areas. Explore ways that the City of Greenville might acquire additional properties in flood-prone areas



- Minimize loss of personal and real property from natural disasters
 - Continue to support subdivision clustering to maximize density while preserving flood hazard areas

- Manage future development so that vulnerability to natural hazards is not significantly increased
 - Continue to support subdivision clustering to maximize density while preserving flood hazard areas. In addition to its existing cluster zoning option, the City adopted a Master Plan Community Ordinance in 2010, which provides incentives (such as allowing higher density) in exchange for planning and design characteristics that promote, e.g., environmentally sustainable development.
 - Ensure that previously flooded properties are maintained as open space
 - Promote greenways, parks and recreation uses throughout the City, particularly along existing streams and in previously flooded areas utilizing flood buyout properties. The Bradford Creek Soccer Complex opened in . This facility is part of the City’s long-range plan to encourage the creation of public and private outdoor recreational uses, as well as preserve open spaces, within an area of the city that was significantly impacted by Hurricane Floyd in 1999.
 - Recommend rezoning requests to consider using the Conservation Overlay Zoning District to ensure that vulnerable areas will never be developed

❖ **Post Disaster Recovery and Reconstruction Plan (PDRRP)**

The City shall either create a Post Disaster Recovery and Reconstruction Plan, or establish a comprehensive hazard recovery section as part of the Emergency Operations Manual. The City of Greenville’s 2008 Emergency Operations Plan includes a Recover Operations section as well as sections on Health Safety and Damage Assessment and Restoration of Essential Services; in addition, the plan incorporates recovery steps as part of its checklists in response to different types of incidents.

The Recovery section is an extension of the Hazard Mitigation Plan. It outlines the process for expediting post disaster recovery and reconstruction. For example, if a hurricane smashes into Greenville and leaves a disaster similar to Hurricane Floyd, The PDRRP will outline the appropriate measures the City should take immediately (basically an extended and more defined version of the Disaster Recovery Coordination Strategy). The critical facilities identified in this plan shall be made a part of the PDRRP, and shall be operational before, and immediately following an event. To date, the critical facilities identified in the PDRRP are included in this document; however, this document includes additional facilities not yet included in the PDRRP. During the next update of the City’s EOP, these two inventories of critical facilities will be merged.



The recovery sections of the plan help to prepare the City to respond to events. It includes information on emergency assistance programs (HMGP, Infrastructure, etc.) for government agencies as well as grant sources for private businesses. Prior to Floyd, there was no comprehensive plan that covered these elements.

In future updates, the City of Greenville might take into consideration possible impacts caused from the interaction between man-made and natural events such as hurricanes/flooding causing chemical spills along railroad tracks.

Goals and Objectives met:

- Decrease the community’s vulnerability to future hazard events
 - . Improve coordination of existing public education resources pertaining natural hazard planning and mitigation
- Reduce loss of life and personal injury from natural hazards
 - Ensure that critical facilities are identified and operational immediately after the occurrence of a hazard
 - Ensure that emergency response is operational, cross reference the Emergency Operations Plan
- Expedite post disaster recovery and reconstruction.
 - Apply for grants that provide for housing and tenant relocation
 - Establish a Flood and Hazard Recovery Division of the Community Development Department. Temporary staff positions would be necessary

❖ **All Hazards Information Library**

Change the City’s Flood Information Library to the All Hazards Information Library to include this plan, information on all natural disasters, and the Post Disaster Recovery and Reconstruction Plan. This library will also contain the City’s Flood Land Reuse Plan. This library shall also contain a computer system, which can illustrate data on the history of disaster occurrences, and can show maps.

Goals and Objectives met:

- Decrease the community’s vulnerability to future hazard events
 - Improve education and outreach to the community regarding flood hazards and flood mitigation, **targeting areas that include properties in the repetitive losses inventory.**
 - Improve education, awareness and outreach to the community regarding other hazards that would affect the entire jurisdiction. **Improve coordination of**



existing public education resources pertaining natural hazard planning and mitigation

- Maintain data in computer-based format, and upgrade and maintain information about hazards in the library collection
 - Enhance the City’s current flood hazard library collection to include this plan as well as information on all types of natural disasters it references

❖ Critical Watershed Protection Areas

Evaluate the feasibility of increasing the boundaries of the City’s current Watershed Protection Overlay to include additional areas of the Tar River Basin, possibly including areas to the south of Greenville that flow to the Neuse River. Currently, the City’s watershed protection ordinance, as mandated by the State of NC, specifically protects the City’s water supply in the watershed. Consider naming the new watershed as a WS-CA (Critical Area) in accordance with NCDENR Division of Water Quality. This will limit impervious coverage within the region, create larger stream buffers, and control storm water runoff. It will also increase the quality of Greenville’s drinking water supply, and prevent further pollution of the Tar River.

Goals and Objectives met:

- Minimize the loss of personal and real property from natural hazards
 - Continue to support Watershed Protection Ordinances, and consider establishing more watershed protection areas, if feasible
 - Consider increasing perennial stream buffer requirements and require buffers along all intermittent streams as well as perennial streams
- Protect the fragile natural and scenic areas located along the Tar River and its tributaries
 - Ensure that stream buffers are undisturbed by development unless storm water improvements are necessary, or walking trails based on the proposed greenway system can be established. The City’s Greenway Master Plan includes a five (5) year priorities plan for linking new trails and bike paths to parks and recreational areas. With the support of a \$1.5 million grant, the City completed the South Tar River Greenway section, with plans to complete additional sections within the next few years. The Greenway network will help to protect stream buffers, as appropriate.

❖ Environmental Planner

In the previous update of this plan, it was recommended that the City of Greenville consider creating a position for an Environmental Planner. This staff member would handle all aspects as they relate to the natural environment including vegetation



regulations, flood damage and prevention standards, greenways, comprehensive environmental plans, and administration of hazard mitigation and flood recovery. This person would be responsible for administering the proposed Post Disaster Recovery and Reconstruction Plan, and would identify and establish the critical facilities that are identified in this plan. This person would also administer greater watershed, floodplain, and tree protection ordinances.

Given anticipated future budget constraints, the recommendation to add a full-time planner to serve as hazard mitigation administrator and work with flood recovery and emergency operations should be **de-prioritized**. Instead, the objective should be to train planning and engineering staff to incorporate the City's environmental planning and hazard mitigation-related goals and objectives as part of ongoing staff duties.

Goals and Objectives met:

- Decrease the community's vulnerability to future hazard events
 - Prepare the Community Development and Public Works departments to implement the strategies in this plan as part of ongoing operations.
- Reduce loss of life and personal injury from natural hazards
 - Ensure that critical facilities are operational immediately after the occurrence of a hazard
- Minimize the damage to public infrastructure resulting from natural hazards
 - Continue ongoing improvements of the emergency evacuation route identification system, including selection of additional sign locations that are visible and strategic. Post evacuation route map(s) on the City of Greenville website
 - Strengthen the City's existing stormwater control ordinances to require new residential development to provide 1-year flood ponds, instead of 10-year flood ponds. Ensure that development complies with all stormwater regulations
- Maintain data in computer-based format, and upgrade and maintain information about hazards in the library collection
 - Continue to enhance the City's website to include information about hazard mitigation and the programs and policies to which it relates. The City's website has been updated to include hazard mitigation & Emergency Operations Plans. Within the next two (2) years, the City should create an interactive webpage dedicated to hazard mitigation & response information and resources.
 - Enhance the City's current flood hazard library collection to include this plan as well as information on all types of natural disasters it references
- Minimize loss of personal and real property from natural hazards



- Continue to ensure that previously flooded or damaged properties are maintained as open space. The Community Development Department is in the process of working with current lessees of flood buy-out properties to extend leases (5 – 10 years) before they expire, thereby encouraging community participation in the maintenance of previously flooded properties as open space.
 - Establish a list of priorities for acquisition of private properties in the event of a future disaster
 - Continue to support Watershed Protection Ordinances, and consider establishing more watershed protection areas
 - Consider increasing perennial stream buffer requirements and require buffers along all intermittent streams as well as perennial streams
- Manage future development so that vulnerability to natural hazards is not significantly increased
- Promote greenways, parks and recreation uses throughout the City, particularly along existing streams and in previously flooded areas utilizing flood buyout properties
 - Recommend rezoning requests to consider using the Conservation Overlay Zoning District to ensure that vulnerable areas will never be developed. The Master Plan Community Ordinance also provides density and other bonuses for employing environmentally sustainable development practices.
- Expedite post disaster reconstruction
- Develop a comprehensive post disaster recovery and reconstruction plan for the City. The City of Greenville’s Emergency Operations Plan now incorporates recovery planning as part of the post-event checklists.
 - Participate in the directives of the Pitt County Emergency Operations Plan (EOP)
 - Continue to establish a flood recovery center when needed to address post disaster issues. Utilize existing staff and create temporary positions for the FRC. Utilize the environmental planner to direct the division
 - Continue to seek funding from state sources such as the Hazard Mitigation Grant Program and the Housing Crisis Assistance Funds for housing and tenant relocation projects
 - Ensure that critical facilities are located within reasonable locations. Consider developing new facilities where needed; several new critical facilities were added to this plan since the last update, including fire stations, the West End Dining Hall, and the Health Sciences Complex.
- Protect the fragile natural and scenic areas located along the Tar River and its tributaries
- Consider establishing a tree preservation and protection ordinance that will address clear cutting and tree removal on private properties. The City of



Greenville adopted perimeter buffer zone tree preservation/removal standards per House Bill 2570, March 2007 (Ord. 07-33).

- Ensure that stream buffers are undisturbed by development unless stormwater improvements are necessary, or walking trails based on the proposed greenway system can be established
- Ensure that the appropriate greenway trail types are used in areas where preservation of natural materials is encouraged; the planned Green Mill Run Branch will feature a boardwalk and bridges to cross over wetlands.

❖ **Center City – West Greenville Revitalization Plan**

The City of Greenville is adopted the Center City – West Greenville Revitalization Plan in 2006. In pursuance of the plan, the Redevelopment Commission has worked with Uptown Greenville, civic leaders, citizens of West Greenville, Uptown business owners, and other stakeholders, as well as with consultants and City staff, to encourage community-based economic development in the City’s historic urban core.

Goals and Objectives met:

- Manage future development so that vulnerability to natural hazards is not significantly increased
 - Support infill development in established areas that have a lower risk of being significantly damaged from a flood or other hazard event. In pursuance of the revitalization plan, the City has utilized bond and grant funds to implement community revitalization. Greenville has received \$400,000 in EPA brownfields assessment grants. The City has developed 48 affordable rental units & 17 for-ownership houses within the West Greenville Redevelopment Area, which has a lower risk of being significantly damaged from a flood or other hazard event.

❖ **Update the Tree Planting and Protection Ordinance**

The Tree Planting and Protection Ordinance shall be updated to include a section on preservation within buffers, and will address clear cutting and tree removal on private properties.

Goals and Objectives met:

- Protect the fragile natural and scenic areas located along the Tar River and its tributaries
 - Consider establishing a tree preservation and protection ordinance that will address clear-cutting and tree removal on private properties. The City of Greenville adopted perimeter buffer zone tree preservation/removal standards per House Bill 2570, March 2007 (Ord. 07-33).



❖ **Flood Insurance Rate Maps (FIRM’s)**

The City shall petition FEMA to review the city's Flood Insurance Rate Maps (FIRM’s) and revise them if appropriate. Recent flooding in Greenville has shown the need for a high level of accuracy for the City's existing FIRM’s.

Goals and Objectives met:

- Decrease the community’s vulnerability to future hazard events
 - Revise the development standards in the Flood Damage Prevention Ordinance so that new single-family residential development (not just multifamily) must be elevated 2 feet above base flood elevation, making the standards consistent with Pitt County standards. Acquire and utilize North Carolina future conditions flood mapping, which requires communities to set development standards in the 500-year flood plain at 2 feet above base flood elevation

❖ **City of Greenville, North Carolina Website**

The City shall update its website to include information regarding natural hazards, GIS maps of the city including the maps created for this plan, and information about hazard mitigation. This website would also describe the CRS reporting requirements, the Hazard Mitigation Grant Program, and other sources of funding. Eventually, all plans, programs and policies the City of Greenville provides shall be in digital format including this plan and all the other plans and programs it references.

Goals and Objectives met:

- Decrease the community’s vulnerability to future hazard events
 - Improve education and outreach to the community regarding flood hazards and flood mitigation, targeting areas that include properties in the repetitive losses inventory.
 - Improve education, awareness and outreach to the community regarding other hazards that would affect the entire jurisdiction. Improve coordination of existing public education resources pertaining natural hazard planning and mitigation
- Maintain data in computer-based format, upgrade the City’s GIS system, and upgrade and maintain information about hazards in the library collection
 - Enhance the City’s website to include information about Hazard Mitigation and the programs and policies it relates to



E. IMPLEMENTATION TIMELINE

Table 19 provides a summary of the proposed implementation strategies and the timeline for completing them. Flooding is considered the highest priority, but all other hazards are considered collectively when creating some of these strategies. Priority levels are organized as follows:

- Priority A = 1-3 years (Start within the first year, finish by the third)
- Priority B = 4-6 years (Start within the 4th year, finish by the 6th)
- Priority C = 7-9 years (Start within the 7th year, finish by the 9th)
- Priority D = 10-12 years (Start within the 10th year, finish by the 12th)

The hazard mitigation plan team performed a process for prioritization of these strategies. The following criteria for prioritization were used:

- Cost-Benefit Review
- Results of Hazard Identification and Analysis
- Results of Vulnerability Analysis
- Results of Community Capability Assessment
- Effectiveness in meeting hazard mitigation goals and comprehensive plan goals



CITY OF GREENVILLE – HAZARD MITIGATION PLAN



Table 19:
Implementation Timeline

Strategy	Priority	Responsibility	\$ Source	Status
Flood Damage & Prevention Ord.	On-going	Public Works, Planning	Operating Budget	On-going
Community Rating System	On-going	Community Development	N/A	Lower CRS Rating to class 8
Comprehensive Plan	On-going	Community Development	CIP	Planning Dept. has completed 6 small area plans since 2004. City in process of completing 2010 Comp Plan Review
2004 Greenway Master Plan & Construction Projects	On-going, 6 priority levels (20+ yrs)	Community Development, Support Group 501(C)(3) Greenways Committee, Public Works	CIP, 501 (C)(3)	5 yr priorities plan for trails & bike paths being implemented. Additional greenway corridors added to system. Completed South Tar River Greenway, with support of \$1.5 million federal grant; project will also include completion of additional sections.
Tar River Floodplain Redevelopment Plan	Completed	Community Development, Public Works, Recreation & Parks	N/A	This plan has been tied in to reuse categories with the FL Reuse Plan
Flood Land Reuse Plan	On-going	Community Development	HMGP	Previously flooded properties bought-out using HMGP & CDBG funds, leased for 5-10 yr periods. Planning Dept. currently looking to extend leases, as appropriate.
Recreation & Parks Master Plan	On-going	Recreation & Parks	CIP	Comp Plan (2008) identified needs through 2020 (\$53.5 million CIP program). Town Common final conceptual plan completed.
Comp. Infrastructure Location Plan	Priority C	Community Development, Greenville Utilities Commission	???	Acquire infrastructural data from GUC, depending on access. If data are accessible, identify areas where utilities are vulnerable to hazards. Identify where utilities are needed. Utilize annual reports, publications. This item was de-prioritized .
Required Open Space Ordinance	Priority A	Community Development	Operating Budget	Planning dept. drafted ordinance; currently under consideration.



CITY OF GREENVILLE – HAZARD MITIGATION PLAN



Strategy	Priority	Responsibility	\$ Source	Status
Update Greenville Webpage	Priority A	Community Development, IT Department	Operating, University, Internships	The City's website was updated to include hazard mitigation & EOP plans. Create a page dedicated to hazard mitigation and response information and resources.
Center City Redevelopment Plan & CDBG Projects	Priority A (Ongoing)	Community Development, Redevelopment Commission (RDC)	Bonds, Grants, CIP, etc.	Plan completed in 2005 and City has since utilized bond & grant funds to implement community revitalization. \$400,000 in EPA brownfields assessment grants. Development of 48 affordable rental units & 17 for-ownership houses.
Post Disaster Recovery & Reconstruction Plan	Priority B	Community Development, Public Works, Police, Fire & Rescue	Operating Budget	Recovery procedures incl. in post-event checklists in EOP. Recommend future assessment of recovery procedures, using case studies/best practices from events in other communities and/or in response to local events.
Critical Watershed Protection Area	Priority B	Community Development	NCDENR - DWQ	Increase the boundaries of City's watershed & classify as "Critical" (WS-CA). Increase stream buffers as appropriate.
Create Environmental Planner Position	Priority D	Community Development	Operating Budget	Given likely budgetary constraints, full-time new planner to serve as HM administrator & work with flood recovery & emergency operations has been de-prioritized .
Staff Training	Ongoing	Community Development, Public Works Department	Operating Budget	Train plg & engineering staff to incorporate environmental planning and hazard mitigation as part of ongoing duties.
Update FIRM Maps		Community Development	FEMA	Review the current FIRM Maps regularly and update if needed.
Natural Hazard Info. Library	Priority D	Community Development, Public Works	Operating Budget	Upgrade the Flood Hazard Library and create a natural hazards library with more info.
Transfer of Development Rights Stds (TDRs)	Deleted item			The previous recommendation to create for TDR's to set up rec. zones for preferred development patterns is no longer under consideration.
Tree Planting & Protection Ordinance Update	Ongoing	Community Development	Operating Budget	Adoption of perimeter buffer zone tree preservation/removal standards per House Bill 2570, March 2007 (Ord. 07-33).



F. MONITORING & EVALUATION

❖ **Assessment of Goals, Objectives & Implementation Strategies**

The goals and objectives of this plan adequately address all hazard mitigation issues in accordance with federal, state and local requirements. Goals and objectives may change over time if it is determined that new risks are associated with the Greenville region, or the federal or state government changes or updates hazard mitigation regulations. The implementation strategies were developed by the Hazard Mitigation Plan team, and adequately reflect Greenville’s position on how to handle hazard mitigation, and how we can meet the goals and objectives.

❖ **Procedure for Monitoring the Plan**

The Hazard Mitigation Plan shall be monitored on a semi-annual basis. The monitoring process shall be conducted by the Community Development Department. At this time, it will be monitored within the Planning Division by one of the Planners, but it is the intention to turn monitoring of the plan over to an Environmental Planner should the City decide the position is needed. Monitoring will include checking the status of all implementation strategies, and making sure they are in the proper review stage. Monitoring will be done semi-annually, however a report will be produced annually.

❖ **Procedure for Evaluation of the Plan**

The Community Development Department shall evaluate the plan bi-annually. The next evaluation will be due by December 31, 2012, and will commence on a two-year cycle immediately following. It is very important to implement the strategies set forth in the plan, but also to commit to regularly sticking to the existing ones. The plan will be evaluated periodically, and will be used as a guide when making other land use decisions, or making comments on specific events in which it is necessary to reference the plan. Specifically with development activities within the floodplain, or annexations, which increase the City’s boundaries, this plan will evaluate that certain circumstances would not be recommended. Evaluation will be processed by a staff member and shall answer the following questions:

- ◆ Do the goals and objectives address current and expected conditions?

The established goals and objectives are expected to be met by evaluating the current progress and implementation of current and future strategies.

- ◆ Has the nature or magnitude of risks changed?

Since the first draft of the plan was written, the magnitude and risk assessment has been adjusted to include more hazards, and establish vulnerability for newer buildings and critical facilities.

- ◆ Are the current resources appropriate for implementing the plan?



There are several proposed implementation strategies (such as the Comprehensive Infrastructure Plan, the Required Open Space Ordinance, and the Post Disaster Recovery and Reconstruction Plan) that would be appropriate for complete implementation over the next five years. An updated evaluation will be assessed on the updated plan sometime in the next two (2) years.

- ◆ Are there implementation problems, such as technical, political, legal or coordination issues with other agencies?

Establishing an environmental planner would help administration and evaluation of the plan considerably. There are no other technical problems the City is aware of at this time.

- ◆ Have the outcomes occurred as expected?

The plan has been updated to meet the requirements of the DMA of 2000. It is anticipated that the City is on schedule.

- ◆ Did the agencies and other partners participate in the plan and planning process as proposed?

Other agencies have had ample opportunities to review the plan as it has been advertised for public hearing in the local newspaper, and letters have been sent to several entities (provided in the appendix). East Carolina University was the only major respondent with specific comments on their critical facilities. This process will once again be evaluated in two years.

These questions will be answered upon submittal of an evaluation report bi-annually.

❖ Procedure for Amending the Hazard Mitigation Plan

Revisions to the Hazard Mitigation Plan will help ensure that local mitigation efforts include the latest and most effective mitigation techniques. Periodic revisions may also be necessary to keep the plan in compliance with all federal and state statutes and regulations. For example, the plan shall be amended periodically to include more information on new future critical facilities, their locations, and their associated costs. Additional development, implementation of mitigation efforts, development of new mitigation processes, and changes in federal and state statutes and regulations may all affect the local hazard mitigation plan. In the context of a Federal disaster declaration, state and local governments are allowed to update or expand an existing plan to reflect circumstances arising out of the disaster. An updated plan in this circumstance might include a re-evaluation of the hazards and the jurisdiction’s exposure to them, a re-assessment of existing mitigation capabilities, and new or additional mitigation recommendations.

The plan will first be in the next two (2) years in order to complete the requirements of future vulnerability assessment, and to update FEMA on the progress of the implementation strategies. **The next review will be completed by December 31, 2012.** After the first review and evaluation, the plan will be reviewed, evaluated and



updated every five (5) years. Once the plan is updated, it will be resubmitted to the North Carolina State Hazard Mitigation Office and to FEMA for review and approval.

Additionally, in the event that any of the disasters occur that appear in this plan, or don't appear in this plan, the plan will be updated to accommodate any change in information, or to outline any new procedures and/or strategies.

◆ **Initiation of Amendments**

Any person or organization, including the Community Development Department, may petition the City Council to amend the Hazard Mitigation Plan. The petition shall be filed with the Community Development Department and shall include a description of the proposed text or map amendment, along with an explanation of the changing circumstances that necessitate consideration of the amendment. Upon initiation of a text or map amendment, the Community Development Department shall forward the proposed amendment to all interested parties, including, but not limited to, all affected City departments, and other interested agencies such as Pitt County, the North Carolina Division of Emergency Management, the United States Army Corps of Engineers, and the Natural Resource Conservation Service for a 30-day review and comment period. At the end of the comment period, the proposed amendment shall be forwarded along with all review comments to the Environmental Advisory Commission, and the Planning and Zoning Commission for their consideration. If no comments are received from the reviewing department or agency within the specified review period, such amendment shall be noted in the Community Development Department's recommendation to these commissions.

◆ **Review and Recommendation by the Environmental Advisory Commission (EAC), and by the Planning & Zoning Commission (P&Z)**

The EAC and P&Z Commissions shall review the proposed amendment, along with the Planning Department's recommendation and any comments received from other departments and agencies. The EAC and P&Z shall submit its recommendation on the proposed amendment to the City Council within forty-five (45) days. Failure of these commissions to do this within this time period shall constitute a favorable recommendation.

◆ **Public Hearing Requirements**

No amendment to the Hazard Mitigation Plan may be adopted until a public hearing has been held. Upon receipt of a recommendation from the EAC and P&Z Commissions, the Community Development Department shall, after consultation with the Clerk to the Board, schedule a public hearing before the City Council. The public notice shall be published one (1) time in a newspaper having general circulation within the City at least ten (10) days prior to the scheduled public hearing date. In computing this period, the date of publication shall not be counted but the date of the public hearing shall be. With respect to map amendments, the Community Development Department shall provide first-class



mail notice of the public hearing to: (a) Owners, according to county tax records, of all properties whose use of land may be affected by the proposed amendment; and (b) Owners, according to tax records, of all properties adjacent to the properties affected by the proposed amendment. The Community Development Department may also post notices of the public hearing in the vicinity of the properties affected by the proposed amendment and take any other action deemed by the Community Development Department to be useful or appropriate to give notice of the public hearing. The notice required or authorized by this section shall: (a) State the date, time, and place of the public hearing; (b) Summarize the nature and character of the proposed change; (c) If the proposed amendment involves a change in potential use of the land, reasonably identify the property whose potential land use would be affected by the amendment; (d) State that the full text of the amendment can be obtained from the City of Greenville Community Development Department; and (e) State that substantial changes in the proposed amendment may be made following the public hearing.

❖ **Implementation of this Plan**

This plan will be implemented as described in table 19. No implementation problems have surfaced to date; however, the City of Greenville will continue to monitor the implementation measures to ensure that they remain effective and up-to-date. In the event that the City encounters technical problems or problems with coordinating the administration of this plan, adjustments will be made, as needed. The next evaluation and update of this plan will occur no later than December 31, 2010.

END OF SECTION



City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

Title of Item: Establish fair market value for the City-owned home at 604 Ford Street

Explanation: This is a request for City Council to set fair market value on a home at 604 Ford Street owned by the City of Greenville. The three-bedroom, two-bath single-family dwelling was built by Pitt Community College Construction Trades students and staff. A Certificate of Occupancy was issued, and an appraisal was completed by Casper Dozier. The appraiser establishes the fair market value at \$87,000.

Fiscal Note: The home was built using 1992 Affordable Housing Bond funds and will be offered for sale at the fair market value. Once the house is sold, the proceeds will be returned to the 1992 Affordable Housing Bond program.

Recommendation: Establish fair market value and sales price at \$87,000.

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / click to download

[604 Ford Appraisal report](#)



Attachment number 1
Page 1 of 15

APPRAISAL OF REAL PROPERTY

LOCATED AT:

604 Ford Street
MB 2/250
Greenville, NC 27834-2936

FOR:

City of Greenville, Community Developmt
P.O. Box 7207, Greenville, NC. 27834

AS OF:

5/3/2010

BY:

Casper E. Dozier
600 Eleanor Street
Greenville, NC. 27858

Casper E. Dozier
Dozier Appraisal & Realty Company
600 Eleanor Street
Greenville, NC. 27858

5/20/2010

City of Greenville, Community Developmt
P.O. Box 7207, Greenville, NC. 27834

Attachment number 1
Page 2 of 15

Re: Property: 604 Ford Street
Greenville, NC 27834-2936
Borrower: Community Development Department
File No.: Pitt-007127

In accordance with your request, we have appraised the above referenced property. The report of that appraisal is attached.

The purpose of this appraisal is to estimate the market value of the property described in this appraisal report, as improved, in unencumbered fee simple title of ownership.

This report is based on a physical analysis of the site and improvements, a locational analysis of the neighborhood and city, and an economic analysis of the market for properties such as the subject. The appraisal was developed and the report was prepared in accordance with the Uniform Standards of Professional Appraisal Practice.

The value conclusions reported are as of the effective date stated in the body of the report and contingent upon the certification and limiting conditions attached.

It has been a pleasure to assist you. Please do not hesitate to contact me or any of my staff if we can be of additional service to you.

Sincerely,



Casper E. Dozier
Dozier Appraisal & Realty Company



SUMMARY OF SALIENT FEATURES

SUBJECT INFORMATION	Subject Address	604 Ford Street	Attachment number 1 Page 3 of 15
	Legal Description	MB 2/250	
	City	Greenville	
	County	Pitt	
	State	NC	
	Zip Code	27834-2936	
	Census Tract	0007.02	
	Map Reference	2-250	
SALES PRICE	Sale Price	\$ N/A	
	Date of Sale	N/A	
CLIENT	Borrower	Community Development Department	
	Lender/Client	City of Greenville, Community Developmt	
DESCRIPTION OF IMPROVEMENTS	Size (Square Feet)	1,285	
	Price per Square Foot	\$	
	Location	West Greenville	
	Age	2 yrs	
	Condition	Good	
	Total Rooms	5	
	Bedrooms	3	
	Baths	2	
APPRAISER	Appraiser	Casper E. Dozier	
	Date of Appraised Value	5/3/2010	
VALUE	Opinion of Value	\$ 87,000	

Uniform Residential Appraisal Report

File # Pitt-007127

The purpose of this summary appraisal report is to provide the lender/client with an accurate, and adequately supported, opinion of the market value of the subject property.

SUBJECT

Property Address 604 Ford Street City Greenville State NC Zip Code 27834-2936
 Borrower Community Development Department Owner of Public Record City of Greenville County Pitt
 Legal Description MB 2/250
 Assessor's Parcel # 007127 Tax Year 2009 R.E. Taxes \$ 1,200 est.
 Neighborhood Name Biltmore S/D, West Greenville Map Reference 2-250 Census Tract 0007.02
 Occupant Owner Tenant Vacant Special Assessments \$ 0 PUD HOA \$ per year per month
 Property Rights Appraised Fee Simple Leasehold Other (describe)
 Assignment Type Purchase Transaction Refinance Transaction Other (describe) Estimate market value
 Lender/Client City of Greenville, Community Developmt Address P.O. Box 7207, Greenville, NC. 27834
 Is the subject property currently offered for sale or has it been offered for sale in the twelve months prior to the effective date of this appraisal? Yes No
 Report data source(s) used, offering price(s), and date(s). MLS, City of Greenville

CONTRACT

I did did not analyze the contract for sale for the subject purchase transaction. Explain the results of the analysis of the contract for sale or why the analysis was not performed. N/A
 Attachment number 1 Page 4 of 15
 Contract Price \$ N/A Date of Contract N/A Is the property seller the owner of public record? Yes No Data Source(s)
 Is there any financial assistance (loan charges, sale concessions, gift or downpayment assistance, etc.) to be paid by any party on behalf of the borrower? Yes No
 If Yes, report the total dollar amount and describe the items to be paid. N/A Grants

NEIGHBORHOOD

Note: Race and the racial composition of the neighborhood are not appraisal factors.

Neighborhood Characteristics		One-Unit Housing Trends		One-Unit Housing		Present Land Use %	
Location	<input checked="" type="checkbox"/> Urban <input type="checkbox"/> Suburban <input type="checkbox"/> Rural	Property Values	<input type="checkbox"/> Increasing <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Declining	PRICE	AGE	One-Unit	90 %
Built-Up	<input checked="" type="checkbox"/> Over 75% <input type="checkbox"/> 25-75% <input type="checkbox"/> Under 25%	Demand/Supply	<input type="checkbox"/> Shortage <input checked="" type="checkbox"/> In Balance <input type="checkbox"/> Over Supply	\$ (000)	(yrs)	2-4 Unit	%
Growth	<input type="checkbox"/> Rapid <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Slow	Marketing Time	<input type="checkbox"/> Under 3 mths <input type="checkbox"/> 3-6 mths <input checked="" type="checkbox"/> Over 6 mths	30	Low 2	Multi-Family	3 %
Neighborhood Boundaries	The area is south of Tar River, east of Memorial Drive, West of Greene Street			120	High 80+	Commercial	2 %
				55	Pred. 50	Other	5 %

Neighborhood Description This is an older section of Greenville. The homes in the area have become less desirable due to condition and surrounding properties. The area is currently being redeveloped one property at a time. The new homes are good quality with modern appliance meeting today's standards of living.
 Market Conditions (including support for the above conclusions) The economic slow down in the economy has created a slow down in the demand for housing in the area.

SITE

Dimensions 63.16' X 95' Area 6,000 Sq.Ft. Shape Rectangular View Residential
 Specific Zoning Classification R-6 Zoning Description Minimum lot size, 6,000 sq. ft.
 Zoning Compliance Legal Legal Nonconforming (Grandfathered Use) No Zoning Illegal (describe)
 Is the highest and best use of subject property as improved (or as proposed per plans and specifications) the present use? Yes No If No, describe

Utilities	Public	Other (describe)	Public	Other (describe)	Off-site Improvements - Type	Public	Private
Electricity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Water	<input checked="" type="checkbox"/>	Street Asphalt	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Gas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sanitary Sewer	<input checked="" type="checkbox"/>	Alley None	<input type="checkbox"/>	<input type="checkbox"/>

 FEMA Special Flood Hazard Area Yes No FEMA Flood Zone X FEMA Map # 3720467800J FEMA Map Date 1/2/2004
 Are the utilities and off-site improvements typical for the market area? Yes No If No, describe
 Are there any adverse site conditions or external factors (easements, encroachments, environmental conditions, land uses, etc.)? Yes No If Yes, describe
 There are properties in the immediate area that need to be either renovated into new homes or the existing homes reconditioned to meet modern living conditions and standards.

IMPROVEMENTS

General Description	Foundation	Exterior Description	materials/condition	Interior	materials/condition
Units <input checked="" type="checkbox"/> One <input type="checkbox"/> One with Accessory Unit	<input type="checkbox"/> Concrete Slab <input checked="" type="checkbox"/> Crawl Space	Foundation Walls	Brick/Good	Floors	Carpet, vinyl/good
# of Stories 1	<input type="checkbox"/> Full Basement <input type="checkbox"/> Partial Basement	Exterior Walls	Vinyl Siding/Good	Walls	Drywall/Good
Type <input checked="" type="checkbox"/> Det. <input type="checkbox"/> Att. <input type="checkbox"/> S-Det./End Unit	Basement Area sq.ft.	Roof Surface	A/S / Good	Trim/Finish	Wood/ Good
<input checked="" type="checkbox"/> Existing <input type="checkbox"/> Proposed <input type="checkbox"/> Under Const.	Basement Finish %	Gutters & Downspouts	None	Bath Floor	Vinyl/Good
Design (Style) Rambler	<input type="checkbox"/> Outside Entry/Exit <input type="checkbox"/> Sump Pump	Window Type	Double Hung/ Good	Bath Wainscot	Fiberglass/Good
Year Built 2008	Evidence of <input type="checkbox"/> Infestation	Storm Sash/Insulated	Insulated /Good	Car Storage	<input checked="" type="checkbox"/> None
Effective Age (Yrs) New	<input type="checkbox"/> Dampness <input type="checkbox"/> Settlement	Screens	Yes/Good	<input checked="" type="checkbox"/> Driveway	# of Cars 2
Attic <input type="checkbox"/> None	Heating <input checked="" type="checkbox"/> FWA <input type="checkbox"/> HWBB <input type="checkbox"/> Radiant	Amenities	<input type="checkbox"/> Woodstove(s) #	Driveway Surface	Concrete
<input checked="" type="checkbox"/> Drop Stair <input type="checkbox"/> Stairs	<input type="checkbox"/> Other <input type="checkbox"/> Fuel HP	<input type="checkbox"/> Fireplace(s) #	<input type="checkbox"/> Fence	Garage	# of Cars
<input type="checkbox"/> Floor <input type="checkbox"/> Scuttle	Cooling <input checked="" type="checkbox"/> Central Air Conditioning	<input type="checkbox"/> Patio/Deck	<input checked="" type="checkbox"/> Porch Front,side	Carport	# of Cars
<input type="checkbox"/> Finished <input type="checkbox"/> Heated	<input type="checkbox"/> Individual <input type="checkbox"/> Other	<input type="checkbox"/> Pool	<input type="checkbox"/> Other	Att.	<input type="checkbox"/> Det. <input type="checkbox"/> Built-in

Appliances Refrigerator Range/Oven Dishwasher Disposal Microwave Washer/Dryer Other (describe)
 Finished area above grade contains: 5 Rooms 3 Bedrooms 2 Bath(s) 1,285 Square Feet of Gross Living Area Above Grade
 Additional features (special energy efficient items, etc.). Front Porch 206 sq. ft., Side Porch 80 sq. ft., Exterior Storage 56 sq. ft.
 Describe the condition of the property (including needed repairs, deterioration, renovations, remodeling, etc.). This dwelling is two years old. It has never been occupied and it is in new condition.
 Are there any physical deficiencies or adverse conditions that affect the livability, soundness, or structural integrity of the property? Yes No If Yes, describe
 Does the property generally conform to the neighborhood (functional utility, style, condition, use, construction, etc.)? Yes No If No, describe
 The home is one of the new properties that are in the current redevelopment program

Uniform Residential Appraisal Report

File # Pitt-007127

There are **5** comparable properties currently offered for sale in the subject neighborhood ranging in price from \$ **50,000** to \$ **120,000**.
 There are **0** comparable sales in the subject neighborhood within the past twelve months ranging in sale price from \$ **50,000** to \$ **120,000**.

FEATURE	SUBJECT	COMPARABLE SALE # 1			COMPARABLE SALE # 2			COMPARABLE SALE # 3		
Address	604 Ford Street Greenville, NC 27834-2936	623 Hudson Street Greenville, NC. 27834			1108 Graves Street Greenville, NC. 27834			2520 B Brookville Drive Greenville, NC. 27834		
Proximity to Subject		0.08 miles SW			3.04 miles N			2.99 miles SW		
Sale Price	\$ N/A	\$ 89,900			\$ 80,000			\$ 97,000		
Sale Price/Gross Liv. Area	\$ sq.ft.	\$ 62.00 sq.ft.			\$ 69.26 sq.ft.			\$ 71.38 sq.ft.		
Data Source(s)		MLS/ Public Records,			MLS/Public Records,			MLS, Public Records		
Verification Source(s)		Drive by, Sells agent			Drive By Inspection, sells agent			Drive By Inspection, sells agent		
VALUE ADJUSTMENTS	DESCRIPTION	DESCRIPTION	+(-) \$ Adjustment	DESCRIPTION	+(-) \$ Adjustment	DESCRIPTION	+(-) \$ Adjustment	DESCRIPTION	+(-) \$ Adjustment	
Sales or Financing Concessions		FHA Seller C.\$2,500		FHA \$2,400 cl. cost		Conventional None Reported				
Date of Sale/Time		11/30/07		7/30/09		11/21/08				
Location	West Greenville	West Greenville			Countryside Est			Cobblestone SD -9,500		
Leasehold/Fee Simple	Fee Simple	Fee Simple			Fee Simple			Fee Simple		
Site	6,000 Sq.Ft.	4,300 sq. ft. +5,000			13,125 sq. ft.			6,534 sq. ft.		
View	Residential	Residential			Residential			Residential		
Design (Style)	Rambler	1 st. Vinyl Ram.			1 st. B/V Ram -4,000			1st B/V,V Ram		
Quality of Construction	Good	Good			Good			Good		
Actual Age	2 yrs	Renovated 1 yr			8 yrs +4,000			2 yrs		
Condition	Good	Good			Average +4,000			Average		
Above Grade Room Count	Total Bdrms. Baths	Total Bdrms. Baths			Total Bdrms. Baths			Total Bdrms. Baths		
	5 3 2	7 4 3 -2,400			5 3 2			5 3 2		
Gross Living Area	1,285 sq.ft.	1,450 sq.ft. -4,950			1,155 sq.ft. +2,600			1,359 sq.ft.		
Basement & Finished Rooms Below Grade	None	None			None			None		
Functional Utility	Average	Average			Average			Average		
Heating/Cooling	FWA,C/A	FWA, C/A			FWA, C/A			FWA, C/A		
Energy Efficient Items	Insulated Glass	Insulated Glass			Insulated Glass			Insulated Glass		
Garage/Carport	None	None			None			None		
Porch/Patio/Deck	Ft.,S., porch	Ft., R porches			Ft. Por,deck			Ft. Por, patio		
Net Adjustment (Total)		<input type="checkbox"/> + <input checked="" type="checkbox"/> - \$ -2,350			<input checked="" type="checkbox"/> + <input type="checkbox"/> - \$ 6,600			<input type="checkbox"/> + <input checked="" type="checkbox"/> - \$ -9,500		
Adjusted Sale Price of Comparables		Net Adj. 2.6 % Gross Adj. 13.7 % \$ 87,550			Net Adj. 8.3 % Gross Adj. 18.3 % \$ 86,600			Net Adj. 9.8 % Gross Adj. 9.8 % \$ 87,500		

SALES COMPARISON APPROACH

I did did not research the sale or transfer history of the subject property and comparable sales. If not, explain **Site purchased**

My research did did not reveal any prior sales or transfers of the subject property for the three years prior to the effective date of this appraisal.

Data Source(s) **Public Record**

My research did did not reveal any prior sales or transfers of the comparable sales for the year prior to the date of sale of the comparable sale.

Data Source(s) **Public Records**

Report the results of the research and analysis of the prior sale or transfer history of the subject property and comparable sales (report additional prior sales on page 3).

ITEM	SUBJECT	COMPARABLE SALE #1			COMPARABLE SALE #2			COMPARABLE SALE #3		
Date of Prior Sale/Transfer	Site purchased	No Sale prior 12 months			No Sale prior 12 months			No Sale prior 12 months		
Price of Prior Sale/Transfer										
Data Source(s)										
Effective Date of Data Source(s)	Current	Current			Current			Current		
Analysis of prior sale or transfer history of the subject property and comparable sales	Site purchased in the redevelopment program									

Summary of Sales Comparison Approach **Comparable number one is a market transaction located in the immediate area. Comparables two and three are located in competing areas. The sales are comparable in quality of construction, basic condition and functional utility.**

Indicated Value by Sales Comparison Approach \$ **87,000** **Cost Approach (if developed) \$ 90,417** **Income Approach (if developed) \$**

The market approach is considered to be the best indicator of the market value. There is limited amount of current sales data in the market area.

RECONCILIATION

This appraisal is made "as is", subject to completion per plans and specifications on the basis of a hypothetical condition that the improvements have been completed, subject to the following repairs or alterations on the basis of a hypothetical condition that the repairs or alterations have been completed, or subject to the following required inspection based on the extraordinary assumption that the condition or deficiency does not require alteration or repair:

Based on a complete visual inspection of the interior and exterior areas of the subject property, defined scope of work, statement of assumptions and limiting conditions, and appraiser's certification, my (our) opinion of the market value, as defined, of the real property that is the subject of this report is \$ 87,000, as of 5/3/2010, which is the date of inspection and the effective date of this appraisal.

Uniform Residential Appraisal Report

File # Pitt-007127

The property meets the minimum property requirements of FHA/HUD Handbook sections 4150.2 and 4905.1

Attachment number 1
Page 6 of 15

ADDITIONAL COMMENTS

COST APPROACH TO VALUE (not required by Fannie Mae)

Provide adequate information for the lender/client to replicate the below cost figures and calculations.

Support for the opinion of site value (summary of comparable land sales or other methods for estimating site value) he land value is based on the past history of similar sales in the immediate area.

COST APPROACH

ESTIMATED <input checked="" type="checkbox"/> REPRODUCTION OR <input type="checkbox"/> REPLACEMENT COST NEW	OPINION OF SITE VALUE			= \$	7,000
Source of cost data Marshall & Swift and local builders	DWELLING	1,285 Sq.Ft. @ \$	80.00	= \$	102,800
Quality rating from cost service Aver. Effective date of cost data 5/010		Sq.Ft. @ \$	= \$	
Comments on Cost Approach (gross living area calculations, depreciation, etc.)	Ft. Porch, side porch, storage			= \$	6,000
The estimated remaining economic life is estimated to be 58 years. The subject property is located among older properties of lesser quality and condition. It is my opinion that a minus adjustment of twenty percent needed due to location.	Garage/Carport Sq.Ft. @ \$			= \$	
	Total Estimate of Cost-New			= \$	108,800
	Less	Physical	Functional	External	
	Depreciation	3,623		21,760	= \$(25,383)
	Depreciated Cost of Improvements			= \$	83,417
	"As-is" Value of Site Improvements			= \$	
Estimated Remaining Economic Life (HUD and VA only) 58 Years	INDICATED VALUE BY COST APPROACH			= \$	90,417

INCOME

INCOME APPROACH TO VALUE (not required by Fannie Mae)

Estimated Monthly Market Rent \$ X Gross Rent Multiplier = \$ Indicated Value by Income Approach

Summary of Income Approach (including support for market rent and GRM)

PUD INFORMATION

PROJECT INFORMATION FOR PUDs (if applicable)

Is the developer/builder in control of the Homeowners' Association (HOA)? Yes No Unit type(s) Detached Attached

Provide the following information for PUDs ONLY if the developer/builder is in control of the HOA and the subject property is an attached dwelling unit.

Legal Name of Project

Total number of phases Total number of units Total number of units sold

Total number of units rented Total number of units for sale Data source(s)

Was the project created by the conversion of existing building(s) into a PUD? Yes No If Yes, date of conversion.

Does the project contain any multi-dwelling units? Yes No Data Source

Are the units, common elements, and recreation facilities complete? Yes No If No, describe the status of completion.

Are the common elements leased to or by the Homeowners' Association? Yes No If Yes, describe the rental terms and options.

Describe common elements and recreational facilities.

Uniform Residential Appraisal Report

File # Pitt-007127

This report form is designed to report an appraisal of a one-unit property or a one-unit property with an accessory unit; including a unit in a planned unit development (PUD). This report form is not designed to report an appraisal of a manufactured home or a unit in a condominium or cooperative project.

This appraisal report is subject to the following scope of work, intended use, intended user, definition of market value, statement of assumptions and limiting conditions, and certifications. Modifications, additions, or deletions to the intended use, intended user, definition of market value, or assumptions and limiting conditions are not permitted. The appraiser may expand the scope of work to include any additional research or analysis necessary based on the complexity of this appraisal assignment. Modifications or deletions to the certifications are also not permitted. However, additional certifications that do not constitute material alterations to this appraisal report, such as those required by law or those related to the appraiser's continuing education or membership in an appraisal organization, are permitted.

SCOPE OF WORK: The scope of work for this appraisal is defined by the complexity of this appraisal assignment and the reporting requirements of this appraisal report form, including the following definition of market value, statement of assumptions and limiting conditions, and certifications. The appraiser must, at a minimum: (1) perform a complete visual inspection of the interior and exterior areas of the subject property, (2) inspect the neighborhood, (3) inspect each of the comparable sales from at least the street, (4) research, verify, and analyze data from reliable public and/or private sources, and (5) report his or her analysis, opinions, and conclusions in this appraisal report.

INTENDED USE: The intended use of this appraisal report is for the lender/client to evaluate the property that is the subject of this appraisal for a mortgage finance transaction.

INTENDED USER: The intended user of this appraisal report is the lender/client.

DEFINITION OF MARKET VALUE: The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller, each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus. Implicit in this definition is the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby: (1) buyer and seller are typically motivated; (2) both parties are well informed or well advised, and each acting in what he or she considers his or her own best interest; (3) a reasonable time is allowed for exposure in the open market; (4) payment is made in terms of cash in U. S. dollars or in terms of financial arrangements comparable thereto; and (5) the price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions* granted by anyone associated with the sale.

*Adjustments to the comparables must be made for special or creative financing or sales concessions. No adjustments are necessary for those costs which are normally paid by sellers as a result of tradition or law in a market area; these costs are readily identifiable since the seller pays these costs in virtually all sales transactions. Special or creative financing adjustments can be made to the comparable property by comparisons to financing terms offered by a third party institutional lender that is not already involved in the property or transaction. Any adjustment should not be calculated on a mechanical dollar for dollar cost of the financing or concession but the dollar amount of any adjustment should approximate the market's reaction to the financing or concessions based on the appraiser's judgment.

STATEMENT OF ASSUMPTIONS AND LIMITING CONDITIONS: The appraiser's certification in this report is subject to the following assumptions and limiting conditions:

1. The appraiser will not be responsible for matters of a legal nature that affect either the property being appraised or the title to it, except for information that he or she became aware of during the research involved in performing this appraisal. The appraiser assumes that the title is good and marketable and will not render any opinions about the title.
2. The appraiser has provided a sketch in this appraisal report to show the approximate dimensions of the improvements. The sketch is included only to assist the reader in visualizing the property and understanding the appraiser's determination of its size.
3. The appraiser has examined the available flood maps that are provided by the Federal Emergency Management Agency (or other data sources) and has noted in this appraisal report whether any portion of the subject site is located in an identified Special Flood Hazard Area. Because the appraiser is not a surveyor, he or she makes no guarantees, express or implied, regarding this determination.
4. The appraiser will not give testimony or appear in court because he or she made an appraisal of the property in question, unless specific arrangements to do so have been made beforehand, or as otherwise required by law.
5. The appraiser has noted in this appraisal report any adverse conditions (such as needed repairs, deterioration, the presence of hazardous wastes, toxic substances, etc.) observed during the inspection of the subject property or that he or she became aware of during the research involved in performing the appraisal. Unless otherwise stated in this appraisal report, the appraiser has no knowledge of any hidden or unapparent physical deficiencies or adverse conditions of the property (such as, but not limited to, needed repairs, deterioration, the presence of hazardous wastes, toxic substances, adverse environmental conditions, etc.) that would make the property less valuable, and has assumed that there are no such conditions and makes no guarantees or warranties, express or implied. The appraiser will not be responsible for any such conditions that do exist or for any engineering or testing that might be required to discover whether such conditions exist. Because the appraiser is not an expert in the field of environmental hazards, this appraisal report must not be considered as an environmental assessment of the property.
6. The appraiser has based his or her appraisal report and valuation conclusion for an appraisal that is subject to satisfactory completion, repairs, or alterations on the assumption that the completion, repairs, or alterations of the subject property will be performed in a professional manner.

Uniform Residential Appraisal Report

File # Pitt-007127

APPRAISER'S CERTIFICATION: The Appraiser certifies and agrees that:

1. I have, at a minimum, developed and reported this appraisal in accordance with the scope of work requirements stated in this appraisal report.
2. I performed a complete visual inspection of the interior and exterior areas of the subject property. I reported the condition of the improvements in factual, specific terms. I identified and reported the physical deficiencies that could affect the livability, soundness, or structural integrity of the property.
3. I performed this appraisal in accordance with the requirements of the Uniform Standards of Professional Appraisal Practice that were adopted and promulgated by the Appraisal Standards Board of The Appraisal Foundation and that were in place at the time this appraisal report was prepared.
4. I developed my opinion of the market value of the real property that is the subject of this report based on the sales comparison approach to value. I have adequate comparable market data to develop a reliable sales comparison approach for this appraisal assignment. I further certify that I considered the cost and income approaches to value but did not develop them, unless otherwise indicated in this report.
5. I researched, verified, analyzed, and reported on any current agreement for sale for the subject property, any offering for sale of the subject property in the twelve months prior to the effective date of this appraisal, and the prior sales of the subject property for a minimum of three years prior to the effective date of this appraisal, unless otherwise indicated in this report.
6. I researched, verified, analyzed, and reported on the prior sales of the comparable sales for a minimum of one year prior to the date of sale of the comparable sale, unless otherwise indicated in this report.
7. I selected and used comparable sales that are locationally, physically, and functionally the most similar to the subject property.
8. I have not used comparable sales that were the result of combining a land sale with the contract purchase price of a home that has been built or will be built on the land.
9. I have reported adjustments to the comparable sales that reflect the market's reaction to the differences between the subject property and the comparable sales.
10. I verified, from a disinterested source, all information in this report that was provided by parties who have a financial interest in the sale or financing of the subject property.
11. I have knowledge and experience in appraising this type of property in this market area.
12. I am aware of, and have access to, the necessary and appropriate public and private data sources, such as multiple listing services, tax assessment records, public land records and other such data sources for the area in which the property is located.
13. I obtained the information, estimates, and opinions furnished by other parties and expressed in this appraisal report from reliable sources that I believe to be true and correct.
14. I have taken into consideration the factors that have an impact on value with respect to the subject neighborhood, subject property, and the proximity of the subject property to adverse influences in the development of my opinion of market value. I have noted in this appraisal report any adverse conditions (such as, but not limited to, needed repairs, deterioration, the presence of hazardous wastes, toxic substances, adverse environmental conditions, etc.) observed during the inspection of the subject property or that I became aware of during the research involved in performing this appraisal. I have considered these adverse conditions in my analysis of the property value, and have reported on the effect of the conditions on the value and marketability of the subject property.
15. I have not knowingly withheld any significant information from this appraisal report and, to the best of my knowledge, all statements and information in this appraisal report are true and correct.
16. I stated in this appraisal report my own personal, unbiased, and professional analysis, opinions, and conclusions, which are subject only to the assumptions and limiting conditions in this appraisal report.
17. I have no present or prospective interest in the property that is the subject of this report, and I have no present or prospective personal interest or bias with respect to the participants in the transaction. I did not base, either partially or completely, my analysis and/or opinion of market value in this appraisal report on the race, color, religion, sex, age, marital status, handicap, familial status, or national origin of either the prospective owners or occupants of the subject property or of the present owners or occupants of the properties in the vicinity of the subject property or on any other basis prohibited by law.
18. My employment and/or compensation for performing this appraisal or any future or anticipated appraisals was not conditioned on any agreement or understanding, written or otherwise, that I would report (or present analysis supporting) a predetermined specific value, a predetermined minimum value, a range or direction in value, a value that favors the cause of any party, or the attainment of a specific result or occurrence of a specific subsequent event (such as approval of a pending mortgage loan application).
19. I personally prepared all conclusions and opinions about the real estate that were set forth in this appraisal report. If I relied on significant real property appraisal assistance from any individual or individuals in the performance of this appraisal or the preparation of this appraisal report, I have named such individual(s) and disclosed the specific tasks performed in this appraisal report. I certify that any individual so named is qualified to perform the tasks. I have not authorized anyone to make a change to any item in this appraisal report; therefore, any change made to this appraisal is unauthorized and I will take no responsibility for it.
20. I identified the lender/client in this appraisal report who is the individual, organization, or agent for the organization that ordered and will receive this appraisal report.

Uniform Residential Appraisal Report

File # Pitt-007127

21. The lender/client may disclose or distribute this appraisal report to: the borrower; another lender at the request of the borrower; the mortgagee or its successors and assigns; mortgage insurers; government sponsored enterprises; other secondary market participants; data collection or reporting services; professional appraisal organizations; any department, agency, or instrumentality of the United States; and any state, the District of Columbia, or other jurisdictions; without having to obtain the appraiser's or supervisory appraiser's (if applicable) consent. Such consent must be obtained before this appraisal report may be disclosed or distributed to any other party (including, but not limited to, the public through advertising, public relations, news, sales, or other media).

22. I am aware that any disclosure or distribution of this appraisal report by me or the lender/client may be subject to certain laws and regulations. Further, I am also subject to the provisions of the Uniform Standards of Professional Appraisal Practice that pertain to disclosure or distribution by me.

23. The borrower, another lender at the request of the borrower, the mortgagee or its successors and assigns, mortgage insurers, government sponsored enterprises, and other secondary market participants may rely on this appraisal report as part of any mortgage finance transaction that involves any one or more of these parties.

24. If this appraisal report was transmitted as an "electronic record" containing my "electronic signature," as those terms are defined in applicable federal and/or state laws (excluding audio and video recordings), or a facsimile transmission of this appraisal report containing a copy or representation of my signature, the appraisal report shall be as effective, enforceable and valid as if a paper version of this appraisal report were delivered containing my original hand written signature.

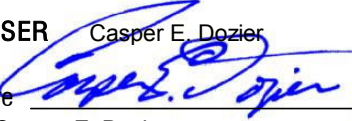
25. Any intentional or negligent misrepresentation(s) contained in this appraisal report may result in civil liability and/or criminal penalties including, but not limited to, fine or imprisonment or both under the provisions of Title 18, United States Code, Section 1001, et seq., or similar state laws.

Attachment number 1
Page 9 of 15

SUPERVISORY APPRAISER'S CERTIFICATION: The Supervisory Appraiser certifies and agrees that:

1. I directly supervised the appraiser for this appraisal assignment, have read the appraisal report, and agree with the appraiser's analysis, opinions, statements, conclusions, and the appraiser's certification.
2. I accept full responsibility for the contents of this appraisal report including, but not limited to, the appraiser's analysis, opinions, statements, conclusions, and the appraiser's certification.
3. The appraiser identified in this appraisal report is either a sub-contractor or an employee of the supervisory appraiser (or the appraisal firm), is qualified to perform this appraisal, and is acceptable to perform this appraisal under the applicable state law.
4. This appraisal report complies with the Uniform Standards of Professional Appraisal Practice that were adopted and promulgated by the Appraisal Standards Board of The Appraisal Foundation and that were in place at the time this appraisal report was prepared.
5. If this appraisal report was transmitted as an "electronic record" containing my "electronic signature," as those terms are defined in applicable federal and/or state laws (excluding audio and video recordings), or a facsimile transmission of this appraisal report containing a copy or representation of my signature, the appraisal report shall be as effective, enforceable and valid as if a paper version of this appraisal report were delivered containing my original hand written signature.

APPRAISER Casper E. Dozier

Signature 
 Name Casper E. Dozier
 Company Name Dozier Appraisal Co.
 Company Address 600 Eleanor Street, Greenville, NC, 27858



Telephone Number (252) 756-5367
 Email Address eddiedozier@earthlink.net
 Date of Signature and Report 5/21/2010
 Effective Date of Appraisal 5/3/2010
 State Certification # A1557
 or State License # _____
 or Other (describe) _____ State # _____
 State NC
 Expiration Date of Certification or License 6/30/2010

ADDRESS OF PROPERTY APPRAISED
604 Ford Street
Greenville, NC 27834-2936

APPRAISED VALUE OF SUBJECT PROPERTY \$ 87,000

LENDER/CLIENT
 Name _____

Company Name City of Greenville, Community Developmt
 Company Address P.O. Box 7207, Greenville, NC. 27834

Email Address _____

SUPERVISORY APPRAISER (ONLY IF REQUIRED)

Signature _____
 Name _____
 Company Name _____
 Company Address _____

Telephone Number _____
 Email Address _____
 Date of Signature _____
 State Certification # _____
 or State License # _____
 State _____
 Expiration Date of Certification or License _____

SUBJECT PROPERTY

- Did not inspect subject property
 Did inspect exterior of subject property from street
 Date of Inspection _____
 Did inspect interior and exterior of subject property
 Date of Inspection _____

COMPARABLE SALES

- Did not inspect exterior of comparable sales from street
 Did inspect exterior of comparable sales from street
 Date of Inspection _____

Uniform Residential Appraisal Report

File # Pitt-007127

FEATURE	SUBJECT	COMPARABLE SALE # 4			COMPARABLE SALE # 5			COMPARABLE SALE # 6		
Address	604 Ford Street Greenville, NC 27834-2936	602 Contentnea Street Greenville, NC. 27834			2643 Weigum Court Greenville, NC. 27834					
Proximity to Subject		0.31 miles E			7.25 miles W					
Sale Price	\$ N/A	\$ 95,500			\$ 85,000			\$		
Sale Price/Gross Liv. Area	\$ sq.ft.	\$ 79.32 sq.ft.			\$ 67.57 sq.ft.			\$ sq.ft.		
Data Source(s)		Public Records,			MLS, Public Records					
Verification Source(s)		Drive By, Seller								
VALUE ADJUSTMENTS	DESCRIPTION	DESCRIPTION	+(-) \$ Adjustment		DESCRIPTION	+(-) \$ Adjustment		DESCRIPTION	+(-) \$ Adjustment	
Sales or Financing Concessions		Redev.Program Grants,\$-?	-10,000		Conventional None Reported					
Date of Sale/Time		12/5/08			11/10/08					
Location	West Greenville	West Greenville			Laras Ridge					
Leasehold/Fee Simple	Fee Simple	Fee Simple			Fee simple					
Site	6,000 Sq.Ft.	8,400 sq. ft.			15,275 sq. ft.			-3,000		
View	Residential	Residential			Residential			Attachment number 1 Page 10 of 15		
Design (Style)	Rambler	1.5 st Vinyl			1st Vinyl Ramb					
Quality of Construction	Good	Good			Good					
Actual Age	2 yrs	New			10 yrs			+5,000		
Condition	Good	Good			Good					
Above Grade	Total Bdrms. Baths	Total Bdrms. Baths			Total Bdrms. Baths			Total Bdrms. Baths		
Room Count	5 3 2	6 3 2			6 3 2					
Gross Living Area	1,285 sq.ft.	1,204 sq.ft.			1,258 sq.ft.			sq.ft.		
Basement & Finished Rooms Below Grade	None	None			None					
Functional Utility	Average	Average			Average					
Heating/Cooling	FWA,C/A	FWA, C/A			FWA, C/A					
Energy Efficient Items	Insulated Glass	Insulated Glass			Insulated Glass					
Garage/Carport	None	None			None					
Porch/Patio/Deck	Ft.,S., porch	Ft. Porch			Ft & R. entran			+1,500		
Net Adjustment (Total)		<input type="checkbox"/> + <input checked="" type="checkbox"/> - \$ -10,000			<input checked="" type="checkbox"/> + <input type="checkbox"/> - \$ 3,500			<input type="checkbox"/> + <input type="checkbox"/> - \$		
Adjusted Sale Price of Comparables		Net Adj. 10.5 % Gross Adj. 10.5 % \$ 85,500			Net Adj. 4.1 % Gross Adj. 11.2 % \$ 88,500			Net Adj. % Gross Adj. % \$		
Report the results of the research and analysis of the prior sale or transfer history of the subject property and comparable sales (report additional prior sales on page 3).										
ITEM	SUBJECT	COMPARABLE SALE # 4			COMPARABLE SALE # 5			COMPARABLE SALE # 6		
Date of Prior Sale/Transfer	Site purchased	No Sale prior twelve months			No Sale prior 12 months					
Price of Prior Sale/Transfer		As Improved			As improved					
Data Source(s)										
Effective Date of Data Source(s)	Current	Current			Current					
Analysis of prior sale or transfer history of the subject property and comparable sales None										
Analysis/Comments Comparable number four is a sale located in the subject area. This sale was a redeveloped property aided by the grant program. Comparable number five is a similar quality and size home located in Bell Arthur. This is considered to be a competing area.										

Subject Photo Page

Borrower/Client	Community Development Department				
Property Address	604 Ford Street				
City	Greenville	County	Pitt	State	NC
Lender	City of Greenville, Community Developmt				
				Zip Code	27834-2936



Subject Front

604 Ford Street
 Sales Price N/A
 G.L.A. 1,285
 Tot. Rooms 5
 Tot. Bedrms. 3
 Tot. Bathrms. 2
 Location West Greenville
 View Residential
 Site 6,000 Sq.Ft.
 Quality Good
 Age 2 yrs
 Attachment number 1
 Page 11 of 15



Subject Rear



Subject Street

Comparable Photo Page

Borrower/Client	Community Development Department			
Property Address	604 Ford Street			
City	Greenville	County Pitt	State NC	Zip Code 27834-2936
Lender	City of Greenville, Community Developmt			



Comparable 1

623 Hudson Street
 Prox. to Subj. 0.08 miles SW
 Sales Price 89,900
 G.L.A. 1,450
 Tot. Rooms 7
 Tot. Bedrms. 4
 Tot. Bathrms. 3
 Location West Greenville
 View Residential
 Site 4,300 sq. ft.
 Quality Good Attachment number 1
 Age Renovated 1 yr



Comparable 2

1108 Graves Street
 Prox. to Subj. 3.04 miles N
 Sales Price 80,000
 G.L.A. 1,155
 Tot. Rooms 5
 Tot. Bedrms. 3
 Tot. Bathrms. 2
 Location Countryside Est
 View Residential
 Site 13,125 sq. ft.
 Quality Good
 Age 8 yrs



Comparable 3

2520 B Brookville Drive
 Prox. to Subj. 2.99 miles SW
 Sales Price 97,000
 G.L.A. 1,359
 Tot. Rooms 5
 Tot. Bedrms. 3
 Tot. Bathrms. 2
 Location Cobblestone SD
 View Residential
 Site 6,534 sq. ft.
 Quality Good
 Age 2 yrs

Comparable Photo Page

Borrower/Client	Community Development Department			
Property Address	604 Ford Street			
City	Greenville	County	Pitt	State NC Zip Code 27834-2936
Lender	City of Greenville, Community Developmt			



Comparable 4

602 Contentnea Street
 Prox. to Subj. 0.31 miles E
 Sales Price 95,500
 G.L.A. 1,204
 Tot. Rooms 6
 Tot. Bedrms. 3
 Tot. Bathrms. 2
 Location West Greenville
 View Residential
 Site 8,400 sq. ft.
 Quality Good Attachment number 1
 Age New Page 13 of 15



Comparable 5

2643 Weigum Court
 Prox. to Subj. 7.25 miles W
 Sales Price 85,000
 G.L.A. 1,258
 Tot. Rooms 6
 Tot. Bedrms. 3
 Tot. Bathrms. 2
 Location Laras Ridge
 View Residential
 Site 15,275 sq. ft.
 Quality Good
 Age 10 yrs

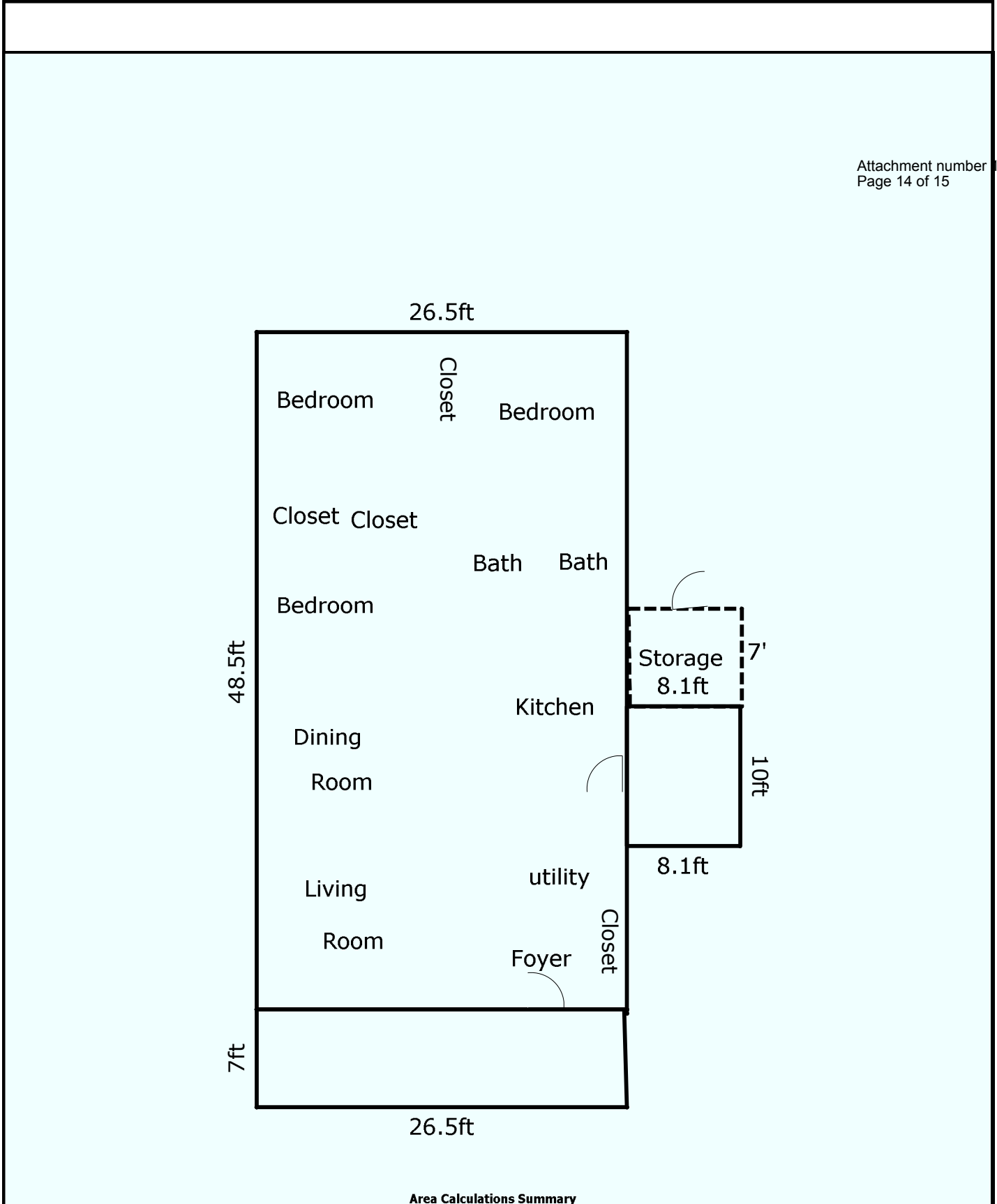
Comparable 6

Prox. to Subj.
 Sales Price
 G.L.A.
 Tot. Rooms
 Tot. Bedrms.
 Tot. Bathrms.
 Location
 View
 Site
 Quality
 Age

Building Sketch

Borrower/Client	Community Development Department				
Property Address	604 Ford Street				
City	Greenville	County	Pitt	State	NC
Lender	City of Greenville, Community Developmt				
				Zip Code	27834-2936

02.2

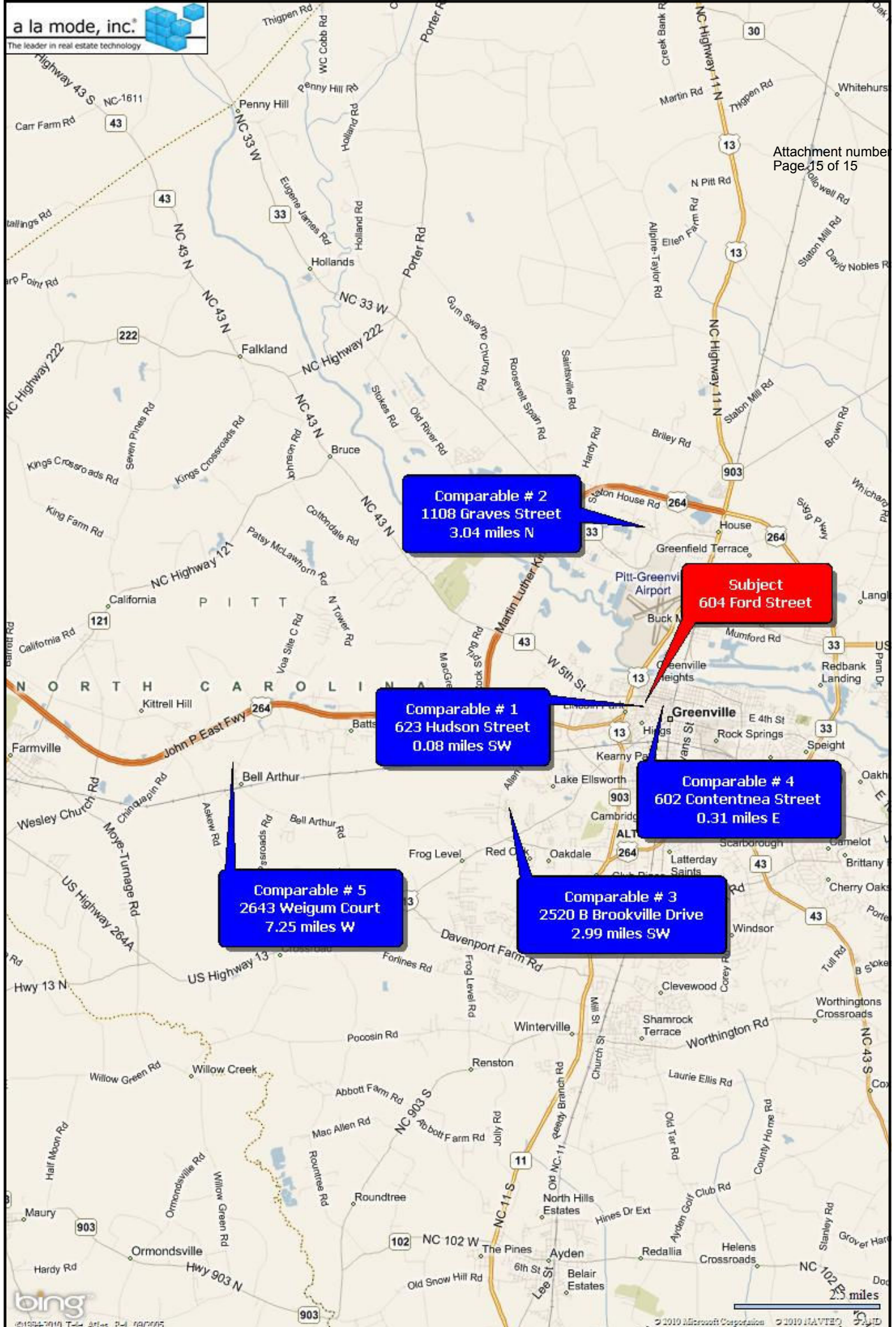


Area Calculations Summary

Living Area	Calculation Details		
First Floor	1285.3 Sq ft	48.5×26.5	= 1285.25
Total Living Area (Rounded):	1285 Sq ft		
Non-living Area			
Open Porch	184.8 Sq ft	7×26.3	= 184.1
		$0.5 \times 6.9 \times 0.2$	= 0.69
		0.2×0.1	= 0.02
		$0.5 \times 0.2 \times 0.2$	= 0.02
Open Porch	81 Sq ft	10×8.1	= 81

Location Map

Borrower/Client	Community Development Department			
Property Address	604 Ford Street			
City	Greenville	County	Pitt	State NC Zip Code 27834-2936
Lender	City of Greenville, Community Developmt			





City of Greenville, North Carolina

Meeting Date: 6/10/2010
Time: 7:00 PM

- Title of Item:** Ordinances adopting budgets for the 2010-2011 Fiscal Year and Operating Plans for Fiscal Year 2011-2012:
- a. City of Greenville including Sheppard Memorial Library and Pitt-Greenville Convention and Visitors Authority
 - b. Greenville Utilities Commission

Explanation: Attached are the Fiscal Year 2010-2011 budget ordinances for the City of Greenville (including Sheppard Memorial Library and Pitt-Greenville Convention & Visitors Authority) and Greenville Utilities Commission. The amounts to be approved include unspent amounts approved within the Fiscal Year 2009-2010. The ordinances establish the fiscal year 2010-2011 budgets and a separate motion will be needed to approve the 2011-2012 operating plans.

Fiscal Note: The 2010-2011 budget ordinances provide revenues and appropriations for the following funds:

General Fund	\$ 72,300,619
Debt Service Fund	4,556,594
Public Transportation Fund	2,617,310
Fleet Maintenance Fund	3,350,397
Sanitation Fund	6,533,013
Bradford Creek Golf Course Fund	809,097
Stormwater Utility Fund	4,552,703
Community Development Housing Fund	1,796,678
Dental Reimbursement Fund	253,348
Capital Reserve Fund	200,000

Vehicle Replacement Fund	3,142,541
Sheppard Memorial Library	2,375,947
Convention & Visitors Authority	982,978
Greenville Utilities Commission	\$273,097,306

Recommendation: Approval of budget ordinances for the 2010-2011 fiscal year and financial plans for 2011-2012.

Viewing Attachments Requires Adobe Acrobat. [Click here](#) to download.

Attachments / click to download

 [Budget Ordinance FY 2010 2011 866407](#)

ORDINANCE NO.

CITY OF GREENVILLE, NORTH CAROLINA
2010-2011 BUDGET ORDINANCE

THE CITY COUNCIL OF THE CITY OF GREENVILLE, NORTH CAROLINA, DOES ORDAIN:

Section I: Estimated Revenue. It is estimated that the following revenues will be available for the City of Greenville during the fiscal year beginning July 1, 2010 and ending June 30, 2011:

GENERAL FUND

Unrestricted Intergovernmental Revenues:

Ad Valorem Taxes;

Current Year Taxes - Operations	\$ 30,459,427	
Prior Year's Taxes and Penalties	(6,391)	
Subtotal		\$ 30,453,036

Sales Tax	\$ 13,153,874	
Video Prog. & Tele. Comm. Svcs Tax	937,555	
Rental Vehicle Gross Receipts	95,950	
Utilities Franchise Tax	5,770,350	
Motor Vehicle Tax	767,309	
Other Unrestricted Intergovernmental Revenues	713,093	
Subtotal		\$ 21,438,131

Restricted Intergovernmental Revenues:

Restricted Intergovernmental Revenues	\$ 1,565,038	
Powell Bill - State allocation payment	1,910,210	
Subtotal		\$ 3,475,248

Licenses, Permits, & Fees:

Privilege Licenses	\$ 618,000	
Other Licenses, Permits & Fees	2,869,524	
Subtotal		\$ 3,487,524

Sales and Services:

Rescue Service Transport	\$ 2,626,000	
Parking Violation Penalties, Leases, and Meters	422,394	
Other Sales and Services	553,915	
Subtotal		\$ 3,602,309

Other Revenues:

Other Revenue Sources	\$ 212,085	
Subtotal		\$ 212,085

Investment Earnings:

Interest on Investments	\$ 1,865,731	
Subtotal		\$ 1,865,731

Other Financing Sources:

Transfer from Greenville Utilities Commission	\$ 5,521,506	
Appropriated Fund Balance	1,245,611	
Other Transfers	999,438	
Subtotal		\$ 7,766,555

TOTAL GENERAL FUND REVENUES

\$ 72,300,619

DEBT SERVICE FUND

Powell Bill Fund	\$	49,563	
Occupancy Tax		535,226	
Transfer from General Fund		<u>3,971,805</u>	
TOTAL DEBT SERVICE FUND			<u>\$ 4,556,594</u>

PUBLIC TRANSPORTATION FUND

Operating Grant 2010-2011	\$	477,497	
Capital Grant 2010-2011		1,203,437	
Planning Grant		28,100	
State Maintenance Assistant Program		175,000	
Hammock Source		818	
Miscellaneous		150	
Pitt Community College Bus Fare		4,300	
Eastern Carolina Vocational Center Service Contract		1,500	
Bus Fares		146,000	
Bus Ticket Sales		56,000	
Pitt Co. Bus Service		4,185	
Appropriated Fund Balance		<u>520,323</u>	
TOTAL PUBLIC TRANSPORTATION FUND			<u>\$ 2,617,310</u>

FLEET MAINTENANCE FUND

Fuel	\$	1,380,444	
Vehicle		974,899	
Labor Fees		983,804	
Pool Car Rentals		<u>11,250</u>	
TOTAL FLEET MAINTENANCE FUND			<u>\$ 3,350,397</u>

SANITATION FUND

Refuse Fees	\$	6,135,613	
NC Mosquito Control		12,000	
Extra Pickup		2,000	
Recycling Revenue		5,000	
Cart and Dumpster		138,400	
Landfill Charges		50,000	
Transfer from General Fund		190,000	
TOTAL SANITATION FUND			<u>\$ 6,533,013</u>

BRADFORD CREEK GOLF COURSE FUND

Green Fees	\$	469,097	
Cart Fees		18,000	
Driving Range		98,000	
Concessions (Food & Beverage)		63,000	
Other (Tournaments, Rentals)		128,000	
Pro Shop Sales		<u>33,000</u>	
TOTAL BRADFORD CREEK GOLF COURSE FUND			<u>\$ 809,097</u>

STORMWATER MANAGEMENT UTILITY FUND

Utility Fee	\$	2,942,000	
Interest on Checking		60,616	
Appropriated Fund Balance		<u>1,550,087</u>	
TOTAL STORMWATER MANAGEMENT UTILITY FUND			<u>\$ 4,552,703</u>

COMMUNITY DEVELOPMENT HOUSING FUND (GRANT PROJECT FUND)

Annual CDBG Grant Funding	\$	887,849	
HUD City of Greenville		575,192	
Program Income		16,000	
Transfer from General Fund		<u>317,637</u>	
TOTAL COMMUNITY DEVELOPMENT HOUSING FUND			<u>\$ 1,796,678</u>

DENTAL REIMBURSEMENT FUND

Employer Contributions - City of Greenville	\$	185,342	
Employee Contributions - City of Greenville		<u>68,006</u>	
TOTAL DENTAL REIMBURSEMENT FUND			<u>\$ 253,348</u>

CAPITAL RESERVE FUND

Appropriated Fund Balance	\$	<u>200,000</u>	
TOTAL CAPITAL RESERVE FUND			<u>\$ 200,000</u>

VEHICLE REPLACEMENT FUND

Transfer from Other Funds	\$	3,142,541	
TOTAL VEHICLE REPLACEMENT FUND			<u>\$ 3,142,541</u>
TOTAL ESTIMATED CITY OF GREENVILLE REVENUES			<u>\$ 100,112,300</u>

SHEPPARD MEMORIAL LIBRARY FUND

City of Greenville	\$	1,127,008	
Pitt County		563,504	
Town of Bethel		27,689	
Town of Winterville		135,375	
State Aid		202,448	
Desk/Copier Receipts		119,281	
Interest		10,680	
Miscellaneous Revenues		46,180	
Greenville Housing Authority		10,692	
LSTA Grant		24,720	
Appropriated Fund Balance		<u>108,370</u>	
TOTAL SHEPPARD MEMORIAL LIBRARY FUND			<u>\$ 2,375,947</u>

PITT-GREENVILLE CONVENTION AND VISITORS AUTHORITY

Occupancy Tax (2%)	\$ 452,081
Occupancy Tax (1%)	226,040
Interest on Checking	10,000
Appropriated Fund Balance	<u>294,857</u>

TOTAL PITT-GREENVILLE CONVENTION AND VISITORS AUTHORITY FUND	<u>\$ 982,978</u>
--	-------------------

Section II: Appropriations. The following amounts are hereby appropriated for the operation of the City of Greenville and its activities for the fiscal year beginning July 1, 2010 and ending June 30, 2011:

GENERAL FUND

Mayor & City Council	\$ 383,212
City Manager	1,106,836
City Clerk	301,737
City Attorney	453,632
Human Resources	2,415,051
Information Technology	2,925,300
Fire/Rescue	12,725,838
Financial Services	2,276,083
Contingency	615,844
Other Post Employment Benefits	250,000
Police	22,231,538
Recreation & Parks	6,189,381
Public Works	8,659,419
Community Development	1,631,515
Capital Improvement	4,406,019
Transfers to Other Funds	5,729,214
TOTAL GENERAL FUND	<u>\$ 72,300,619</u>

DEBT SERVICE FUND

Debt Service	\$ 4,556,594
--------------	--------------

PUBLIC TRANSPORTATION FUND

Transit	\$ 2,617,310
---------	--------------

FLEET MAINTENANCE FUND

Fleet	\$ 3,350,397
-------	--------------

SANITATION FUND

Sanitation Service	\$ 6,533,013
--------------------	--------------

BRADFORD CREEK GOLF COURSE FUND

Bradford Creek Golf Course \$ 809,097

STORMWATER MANAGEMENT UTILITY FUND

Stormwater Management Utility \$ 4,552,703

COMMUNITY DEVELOPMENT HOUSING PROGRAM FUND

Community Development Housing/CDBG \$ 1,796,678

DENTAL REIMBURSEMENT FUND

Dental Reimbursement Fund \$ 253,348

CAPITAL RESERVE FUND

Capital Reserve Fund \$ 200,000

VEHICLE REPLACEMENT FUND

Vehicle Replacement Fund \$ 3,142,541

TOTAL CITY OF GREENVILLE APPROPRIATIONS \$ 100,112,300

SHEPPARD MEMORIAL LIBRARY FUND

Sheppard Memorial Library \$ 2,375,947

PITT-GREENVILLE CONVENTION AND VISITORS AUTHORITY

Pitt-Greenville Convention and Visitors Authority \$ 982,978

Section III: Encumbrances. Appropriations herein authorized and made shall have the amount of outstanding purchase orders as of June 30, 2010, added to each appropriation as it appears in order to account for the expenditures in the fiscal year in which it was paid.

Section IV: Taxes Levied. There is hereby levied a tax rate of 52 cents per one hundred dollars (\$100) valuation of taxable properties, as listed for taxes as of January 1, 2010, for the purpose of raising the revenue from current year's property tax, as set forth in the foregoing estimates of revenue, and in order to finance the foregoing appropriations.

Section V: Salaries.

(a) Salaries of Elected Officials. The annual salaries of the Mayor, Mayor Pro-Tem, and other members of the City Council shall be as follows:

Mayor	\$ 11,500
Mayor Pro-Tem	\$ 7,800
Council Members	\$ 7,500

(b) Salary Cap of Greenville Utilities Commission Members. Pursuant to Section 4 of the Charter of the Greenville Utilities Commission of the City of Greenville, the monthly salaries of members of the Greenville Utilities Commission shall not exceed the following caps:

Chair	\$ 350
Member	\$ 200

Section VI: Amendments.

(a) Pursuant to General Statutes 159-15, this budget may be amended by submission of proposed changes to the City Council.

(b) Notwithstanding Subsection (a) above, the City Manager is authorized to transfer funds from one appropriation to another within the same fund in an amount not to exceed \$10,000. Any such transfers shall be reported to the City Council at its regular meeting and shall be entered in the minutes.

(c) In case of emergency which threatens the lives, health, or safety of the public, the City Manager may authorize expenditures in an amount necessary to meet the emergency so long as such amount does not exceed the amount in contingency accounts and the expenditure is reported to the City Council as soon as possible, and the appropriate budget amendments are submitted at the next regular meeting.

Section VII: The Manual of Fees, dated July 1, 2010, is adopted herein by reference.

Section VIII: Community Development. The City Council does hereby authorize grant project funds for the operation of FY 2010-2011 CDBG Entitlement and Community Development Home Consortium programs under the Community Development Block Grant Program and Home Consortium Program for the primary purpose of housing rehabilitation and other stated expenditures.

Section IX: Greenville Utilities Commission. The City Council adopts a separate ordinance for the budget of the Greenville Utilities Commission.

Section X: Distribution. Copies of this ordinance shall be furnished to the City Manager and the Director of Financial Services of the City of Greenville to be kept on file by them for their direction in the disbursement of funds.

ADOPTED this the 10th day of June, 2010.

Patricia C. Dunn, Mayor

ATTEST:

Carol L. Barwick, City Clerk

ORDINANCE NO. _____
 CITY OF GREENVILLE, NORTH CAROLINA
 2010-11 GREENVILLE UTILITIES COMMISSION BUDGET ORDINANCE

THE CITY COUNCIL OF THE CITY OF GREENVILLE, NORTH CAROLINA, DOES ORDAIN:

Section I. Estimated Net Revenues and Fund Balances. It is estimated that the following non-tax revenues and fund balances will be available during the fiscal year beginning July 1, 2010 and ending June 30, 2011 to meet the subsequent expenditures, according to the following schedules:

	<u>REVENUE</u>		<u>BUDGET</u>
A.	<u>Electric</u>		
	Rates & Charges	\$198,190,528	
	Fees & Charges	852,000	
	U.G. & Temp. Service Charges	108,000	
	Miscellaneous	605,359	
	Interest on Investments	600,000	
	Installment Purchase	882,040	
	Total Electric Revenue		\$201,237,927
B.	<u>Water</u>		
	Rates & Charges	\$14,065,803	
	Fees & Charges	327,734	
	Capacity Fees	165,000	
	Miscellaneous	161,114	
	Interest on Investments	50,000	
	Bond Proceeds	504,000	
	Installment Purchase	51,620	
	Total Water Revenue		\$15,325,271
C.	<u>Sewer</u>		
	Rates & Charges	\$15,146,007	
	Fees & Charges	302,561	
	Capacity Fees	125,000	
	Acreage Fees	153,000	
	Pitt County	130,437	
	Miscellaneous	111,359	
	Interest on Investments	110,000	
	Installment Purchase	183,040	
	Transfer from Capital Projects	187,000	
	Appropriated Fund Balance	200,000	
	Total Sewer Revenue		\$16,648,404
D.	<u>Gas</u>		
	Rates & Charges	\$39,330,024	
	Fees & Charges	136,500	
	Miscellaneous	127,780	
	Interest on Investments	120,000	
	Installment Purchase	171,400	
	Total Gas Revenue		\$39,885,704
	TOTAL REVENUE		\$273,097,306

Section II. Expenditures. The following amounts are hereby estimated for the Greenville Utilities Commission to be expended for managing, operating, improving, maintaining, and extending electric, water, sewer and gas utilities during the fiscal year beginning July 1, 2010 and ending on June 30, 2011, according to the following schedules:

BUDGET

Governing Body Department	\$3,810,832
Finance Department	\$17,628,125
Human Resources Department	\$3,325,870
IT Department	\$3,493,432
Customer Relations Department	\$4,501,453
Electric Department	\$186,648,365
Meter	\$2,535,942
Water Department	\$7,937,599
Sewer Department	\$7,661,440
Gas Department	\$35,059,331
Utility Locating Services	<u>\$494,917</u>
TOTAL EXPENDITURES	<u><u>\$273,097,306</u></u>

Section III: Amendments. (a) Pursuant to General Statutes 159-15, this budget may be amended by submission of proposed changes to the City Council.

(b) Notwithstanding Subsection (a) above, the General Manager/CEO of Greenville Utilities Commission is authorized to transfer funds from one appropriation to another within the same fund in an amount not to exceed \$10,000. Any such transfers shall be reported to the Greenville Utilities Commission and the City Council at their next regular meeting and shall be entered in the minutes.

(c) In case of emergency which threatens the lives, health, or safety of the public, the General Manager/CEO may authorize expenditures in an amount necessary to meet the the emergency so long as such amount does not exceed the amount in contingency accounts and the expenditure is reported to the Greenville Utilities Commission as soon as possible, and appropriate budget amendments are submitted to the City Council, if necessary, at its next regular meeting.

Section IV: Distribution. Copies of this ordinance shall be furnished to the General Manager/CEO and the Chief Financial Officer of the Greenville Utilities Commission, and the Director of Financial Services of the City of Greenville to be kept on file by them for their direction in the disbursement of funds

Adopted this the _____ day of June, 2010.

Patricia C. Dunn, Mayor

Attest:

Carol L. Barwick, City Clerk