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# SUBDIVISION REGULATIONS

**Town of Wake Forest**  
Wake County, North Carolina

**(Ordinance No. 74-10)**

**Amended:** Ordinance #86-22 dated June 12, 1986  
**Amended:** January 16, 2007

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# **ARTICLE I. LEGAL PROVISIONS**

## **A. Purpose.**

This ordinance is designed and enacted to provide for the orderly development of the Town of Wake Forest, North Carolina and its environs through the control and regulations of the subdivision of the land. The regulations contained herein are intended to coordinate proposed development with existing development and with officially adopted plans for the future development of the Town; to insure the provisions of adequate facilities for transportation, water, sewerage, and other public facilities in subdivisions; to insure the proper legal description, monumentation, and recording of subdivided land; and to create conditions essential to public health, safety, and general welfare.

## **B. Authority.**

The Town of Wake Forest, North Carolina hereby exercises its authority to make and issue Subdivision Regulations under provisions pursuant to Chapter 160A, Article 19, Part 2 of the General Statutes of the State of North Carolina.

## **C. Jurisdiction and Effective Date.**

On and after November 1, 1974, the regulations contained herein shall govern each and every subdivision of land within the corporate limits and the extraterritorial planning area of the Town of Wake Forest, North Carolina, as established by an ordinance and map adopted by the Board of Commissioners of Wake Forest in accordance with North Carolina General Statutes 160A\_360, which are on file in the office of the Register of Deeds in Wake County.

## **D. No Services or Permits Until Final Plat Approval.**

No street shall be maintained or accepted by the Town, nor shall any water or sewer be extended to or connected with any subdivision of land, nor shall any permit be issued by an administrative agent or department of the Town of Wake Forest for the construction or any building or other improvement requiring a permit, upon any land for which a plat is required to be approved, unless and until the requirements set forth in this ordinance have been complied with and the Final Plat has been approved and recorded with the Wake County Register of Deeds.

## **E. Separability.**

Should any section or provisions of these regulations be for any reason held void by the courts, it shall not affect the validity of any other section or provisions herein which is not itself held void or invalid.

## **F. Penalties.**

After the effective date of this ordinance, any person who, being the owner or agent of the owner of any land located within the territorial jurisdiction of the Town of Wake Forest, subdivides his land in violation of this ordinance or transfers or sells land by reference to, exhibition of, or any other use or a plat showing a subdivision of the land before the plat has been properly approved under the terms of this ordinance and recorded

in the office of the Wake County Register of Deeds, shall be guilty of a misdemeanor. The description by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring land shall not exempt the transaction from this penalty. The Town through its attorney or other official designated by the Wake Forest Board of Commissioners may enjoin an illegal subdivision, transfer, or sale of land by action for injunction. Further, violators of this ordinance shall be subject upon conviction, to fine and/or imprisonment as provided by Chapter 160A\_375.

**G. Amendment Procedure.**

This ordinance may be amended from time to time by the Wake Forest Town Board of Commissioners but no amendment shall become effective unless it shall have been submitted to the Planning and Zoning Board for review and recommendations. The Planning and Zoning Board shall have forty-five (45) days within which to submit its report. If the Planning and Zoning Board fails to submit a report within the specified time, it shall be deemed to have approved the amendment. Further, no amendment to this ordinance shall become effective until the Board of Commissioners has held a public hearing on the proposed amendment. Notice of such public hearing shall be published once per week for two successive weeks in a newspaper of general circulation within the Wake Forest planning area. The notice shall be first published not less than fifteen (15) days nor more than twenty-five (25) days prior to the date fixed for the hearing. The notice shall indicate the date, time, and place of the hearing and shall include a statement of the substance of the proposed amendment.

**H. Variances.**

Where, because of topographical or other conditions peculiar to the site, strict adherence to the provisions of this ordinance would cause any unnecessary hardship, the Planning and Zoning Board may recommend, and the Board of Commissioners authorize, a variance if such variance can be made without destroying the intent of this ordinance and not adversely affecting public health. Any variance thus authorized is required to be entered in writing in the minutes of the Planning and Zoning Board and the Board of Commissioners with the reasoning on why the departure was justified and set forth.

**I. Exceptions for Planned Unit Developments and Traditional Neighborhood Developments.**

The standards and requirements of this ordinance may be modified in the case of a planned unit development or traditional neighborhood development, as provided for in the Wake Forest Zoning Ordinance, if, in the judgment of the Board of Commissioners, the modifications are not repugnant to the intent of this ordinance and conform to the requirements of the Wake Forest Zoning Ordinance.

**J. Repealing of Existing Subdivision Regulations.**

On and after the effective date of this ordinance, all provisions of the existing Subdivision Regulations of the Town of Wake Forest are declared to be repealed.

No subdivision for which a Final Plat has been approved under the provisions of the previously enacted Subdivision Regulations shall be affected in any way by the enactment of this ordinance. Any or all subdivisions for which a Preliminary Plat has

been approved under the provisions of the previous Subdivision Regulations prior to November 1, 1974, shall be required to comply with this ordinance at the discretion of Wake Forest Board of Commissioners. Any or all subdivisions for which Preliminary Plat approval has not been granted by or after the date of adoption of this ordinance shall be required to comply with this ordinance.

**K. Planning Department to act in lieu of Board of Commissioners.**

The Planning Department shall act in lieu of the Board of Commissioners as provided in N.C.G.S. 160A-373(3) concerning the approval of all minor, construction and final subdivision plats. The director of the Planning Department, unless otherwise designated by the Board of Commissioners, shall be the Subdivision Administrator.

## ARTICLE II. DEFINITIONS

### A. General Definitions.

1. ***Alley.*** A minor right-of-way privately or publicly owned, primarily for service access.
2. ***Buffer Strip.*** An unused strip or land five (5) feet or more in width planted with evergreen trees, spaced not more than ten (10) feet apart, and not less than one (1) row of dense evergreen shrubs spaced not more than five (5) feet apart, at least five (5) feet or more in height, which shall be established and maintained in perpetuity by the owner of the property. No building or part of a building, no driveway or parking area shall occupy any part of a buffer strip.
3. ***Building Setback Line.*** A line parallel to the front property line in front of which no structure shall be erected. Setbacks shall be figured from the right-of-way line.
4. ***Corner Lot.*** A lot which abuts the right-of-way of two streets at their intersection.
5. ***Dedication.*** A gift, by the owner, or a right to use land for a specified purpose or purposes. Because a transfer of property rights is entailed, dedication must be made by written instrument, and is completed with an acceptance.
6. ***Double Frontage Lot.*** A continuous (through) lot which is accessible from both streets upon which it fronts.
7. ***Easement.*** A grant or one or more of the property rights by the property owner for limited use of private land for a public or quasi-public purpose and within which the owner of the property shall not erect any permanent structures except when authorized by the Town.
8. ***Easement, Conservation.*** An easement granting a right or interest in real property that is appropriate to retaining land or water areas predominantly in their natural, scenic, open, or wooded condition.
9. ***Expressway.*** An expressway is a divided street or road which serves through traffic with full or full partial control of access and generally with grade separations at intersections; however, infrequent at-grade crossings may be permitted.
10. ***Flag Pole Lot.*** A lot not fronting on a public street and where access to the public street is by a narrow private driveway. (See Ordinance #86-22 dated June 12, 1986).
11. ***Freeway.*** A freeway is a divided street or road which serves through traffic with full control of access and with grade separations at intersections.

12. **Greenway.** An interest in real property to the Town which provides for continuous public access and preservation of open space. Members of the general public have free access to and use of the greenway. Greenway uses may include: walking, fishing, nature studies, bicycling, canoeing, jogging, and picnicking, but use and access of the greenway, including that of the property owner shall always be subject to the laws, ordinances and regulations of the Town. Within greenways, grading; excavation; dredging; the addition or removal of soil or other materials; the erection of buildings, signs, fences, drainage devices or structures; the removal, destruction or cutting of vegetation, trees or shrubs is prohibited except when authorized by the Town. The Town may erect trails, trail markers, place litter receptacles and other convenience facilities within the greenway boundaries.
13. **Lot.** A parcel of land having frontage on a public street or other officially approved means of access occupied or intended to be occupied by a principal structure or use and sufficient in size to meet the lot width, lot area, yard, parking area, and other open space provisions of this ordinance and of the Wake Forest Zoning Ordinance. (See Ordinance #86-22 dated June 12, 1986).
14. **Lot Frontage.** The lot width measured at the street right-of-way line from which the lot obtains access. (See Ordinance #86-22 dated June 12, 1986).
15. **May.** The term "*may*" shall be construed as optional rather than mandatory.
16. **Official Maps or Plans.** Any maps or plans officially adopted by the Wake Forest Board of Commissioners as a guide to the development of the Town of Wake Forest.
17. **Planned Unit Development.** The planned unit development is a permitted use designed to provide for developments incorporating a single type or a variety of residential and related uses which are planned and developed as a unit. Such development may consist of individual lots or common building sites. Common land must be an element of the plan related to affecting the long-term value of the entire development.
18. **Planning and Zoning Board.** The Planning and Zoning Board of the Town of Wake Forest.
19. **Plat.** A map or plan of a parcel of land which is to be, or has been subdivided.
20. **Private Driveway.** A roadway serving two (2) or fewer lots, building sites or other divisions of land and not intended to be public ingress or egress.
21. **Public or Community Sewage Disposal System.** A sanitary sewage disposal system with 3,000 gallons or more design capacity and/or whose effluent is discharged to surface water. This system shall be approved under the rules and regulations promulgated by the Division of Environmental Management, North Carolina Department of Natural and Economic Resources.

22. **Public or Community Water Supply System.** A system serving ten (10) or more residences or businesses or combination of residences and businesses, including municipal and sanitary district water systems as well as water systems designed to serve particular subdivisions at full development constructed to specifications approved by the Division of Health Services, North Carolina Department of Human Resources.
23. **Single-tier Lot.** A lot which backs upon a limited access highway, a railroad, a physical barrier, or another type of land use and to which access from the rear is usually prohibited.
24. **Shall.** The word "*shall*" shall be construed as mandatory.
25. **Streets.** A dedicated and accepted public right-of-way for vehicular traffic. The following classification shall apply:
- a. **Major Thoroughfare** - Interstate, freeways, expressways, and major streets that provide for the expeditious movement of volumes of traffic within and through urban areas which has been designated as a major thoroughfare on the Thoroughfare Plan.
  - b. **Minor Thoroughfare** - A street which carries traffic from local streets to the system of major thoroughfares which has been designed as a minor thoroughfare on the Thoroughfare Plan.
  - c. **Local Street** - A street whose principal function is to provide access to adjacent properties.
  - d. **Frontage Road** - A local street parallel and adjacent to a major thoroughfare or railroad, which provides access to abutting properties, protection from through traffic, and control of access to the major thoroughfare.
  - e. **Cul-de-Sac** - A short local street having one open end to traffic and the other terminated by a vehicular turnaround.
26. **Subdivider.** Any person, firm, or corporation who subdivides or develops any land deemed to be a subdivision as herein defined.
27. **Subdivision.** For the purpose of this ordinance the term "*subdivision*" shall mean all divisions of a tract or parcel of land into two or more lots, building sites, or other divisions for the purpose of sale, or building development (whether immediate or future) and shall include all division of land involving the dedication of a new street or a change in existing streets, but the following shall not be included within this definition nor be subject to the regulations established herein:

- a. The combination or recombination of portions of previously platted lots where the total number of lots is not increased and the resultant lots are equal to or exceed the standards of the municipality as shown in its subdivision regulations;
- b. The division of land into parcels greater than ten (10) acres where no street right-of-way dedication is involved;
- c. The public acquisition by purchase of strips of land for the widening or opening of streets; and
- d. The division of a tract in single ownership whose entire area is no greater than two (2) acres into not more than three (3) lots, where no street right-of-way dedication is involved and where the resultant lots are equal to or exceed the standards of the municipality, as shown in this ordinance and the Zoning Ordinance of Wake Forest and the standards of the Wake County Health Department.

**B. Word Interpretation**

For the purpose of this Ordinance, certain words shall be interpreted as follows:

The present tense includes the future tense and the future tense includes the present tense.  
The singular includes the plural and the plural includes the singular.

## ARTICLE III. PROCEDURE FOR SUBDIVISION APPROVAL

### A. General Requirements:

(See Ordinance #86-22 dated June 12, 1986.)

1. General Requirements. There are two (2) procedures applicable to subdivision final plat approval - an administrative procedure and regular procedure. The subdivision of land NOT involving a street dedication, but requiring only dedication of right-of-way to widen an existing street and no water and sewer extension and consisting of no more than three (3) lots shall follow the administrative procedure. Subdivision of lands involving dedication of a new street right-of-way, water, and/or sewer extensions or four (4) or more lots shall be required to follow the regular procedure. If any area proposed for subdivision is part of a larger tract that has sufficient lot area to be resubdivided which the subdivider owns, has an option on or legal interest in, any part of the tract shall not be subdivided under the administrative procedure.
2. Adequate and safe access shall be provided when creating a subdivision. In no case shall a lot have less than 15 foot lot frontage. Under the administrative procedure, flag pole lots may be permitted provided that:
  - a. there is a minimum lot frontage of 15 feet when a driveway gives access to one (1) dwelling unit.
  - b. there is a minimum lot frontage of 30 feet when a driveway gives access to two (2) dwelling units.

If any area proposed for subdivision is a part of a larger tract has sufficient lot area to be resubdivided, which the subdivider owns, has an option on or legal interest in, no more than three (3) flagpole lots shall be permitted. A new street right-of-way shall be dedicated to give access to four (4) or more lots.

### B. Administrative Procedure

#### 1. Final Plat

- a. **Final Plat Submitted.** The subdivider shall submit the final plat for administrative approval during the Town of Wake Forest business hours. The final plat shall be submitted with one blue line or black line print. When the plat is received, the Subdivision Administrator may take up to 24 hours to review the final plat with respect to the specifications addressed in Article III, Section B.1. The subdivider will then record the plat and return one mylar sepia to the Town for a permanent copy. The plat shall be prepared by a Registered Land Surveyor, licensed to practice in North Carolina. The copies shall be prepared on sheets that have an outside marginal size of not more than 21" x 30" and not less than 11" x

17" drawn to scale of not less than one (1) inch equals one hundred (100) feet.

- b. **What the Final Plat Shall Show.** The final plat shall show all the required criteria, which is:
- 1) ***Zoning of Tract.*** Zoning classification on the land to be subdivided and on adjoining land.
  - 2) ***Boundary.*** The exact boundary lines of tract to be subdivided fully, dimensioned by lengths and bearings, and the location of intersecting boundary lines of adjoining lands, with adjacent subdivisions identified by official maps. Also square footage and acreage of such lot.
  - 3) ***Monument and Control Corners.*** The accurate locations and descriptions of all monuments, markers, and control points.
  - 4) ***Survey Data.*** Sufficient data to determine readily and reproduce on the ground every straight or curved boundary line, street line, lot line, right-of-way, easement line, and setback line, including dimensions, bearings, or deflection angles, radii, arcs, chords, central angles, and tangent distances for the center line of curved streets and curved property lines that are not the boundary of curved streets. All dimensions shall be measured to the nearest one-hundredth (1/100th) of a foot and all angles to the nearest one-half (½) minute.
  - 5) ***Elevation Flood Data.*** Base flood elevation data shall be provided for subdivision proposals greater than fifty (50) lots or five (5) acres, whichever is less.
  - 6) ***Streets.*** The widths, and names where appropriate, of all proposed streets and alleys, and of all adjacent streets and alleys, and easements which shall be properly located.
  - 7) ***Easements.*** The location of all rights-of-way, easements, and areas to be dedicated to public use with the purpose of each stated.
  - 8) ***Names and Vicinity Map.*** The name of the owner, and the surveyor, landscape architect, engineer, and their respective addresses and telephone numbers. Also, the name of the subdivision and a sketch vicinity map showing relationship between subdivision and surrounding areas at a legible scale. The vicinity map should be drawn to a scale of 1" = 800' and a north arrow shown.

- 9) ***Building Setback Lines.*** Minimum building setback lines.
- 10) ***Block and Lot Numbers.*** The blocks numbered consecutively throughout the entire subdivision and the lots numbered **consecutively** throughout each block.
- 11) ***Deed Restrictions on the Property.*** A statement indicating whether deed restrictions exist, the subject, and location.
- 12) ***Date.*** Date of the survey and plat preparation, a north arrow indicating whether true or magnetic, and graphic scale.
- 13) ***Certificate Required.***

a) **Certificate of Ownership and Dedication.**

I hereby certify that I am the owner of the property shown and described hereon, which is located in the subdivision jurisdiction of Wake Forest, and that I hereby adopt this plan of subdivision with my free consent, establish minimum building setback lines, and dedicate all streets, alleys, walks, parks, and other sites and easements to public or private use as noted.

\_\_\_\_\_ Date \_\_\_\_\_ Owner(s)

b) **Certificate of Survey and Accuracy**

I \_\_\_\_\_, certify that this plat was drawn under my supervision from (an actual survey made under my supervision) (Deed description recorded in Book \_\_\_\_\_, Page \_\_\_\_\_, etc.); (other); that the boundaries not surveyed are shown as broken lines plotted from information found in Book \_\_\_\_\_, Page \_\_\_\_\_; that this plat was prepared in accordance with G.S. 47\_30 as amended. Witness my original signature, registration number and seal this the \_\_\_\_\_ day of \_\_\_\_\_ A.D., 19 \_\_\_\_.

\_\_\_\_\_ Surveyor

(SEAL OR STAMP) \_\_\_\_\_  
Registration Number

- c) **Certificate of Notary.**  
 "North Carolina, \_\_\_\_\_ County. I, a Notary Public of the County and State aforementioned, certify that \_\_\_\_\_, a Registered Land Surveyor, personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness my hand and official stamp or seal, this the \_\_\_\_ day of \_\_\_\_\_, 19\_\_.

(SEAL OR STAMP) \_\_\_\_\_  
 Notary Public

My Commission expires \_\_\_\_\_

- d) **Approval from Wake County Health Department.**  
 If septic tanks are to be installed, a letter from the Wake County Health Department will be required indicating their approval of the subdivision.
- e) **Approved for recording by the Town of Wake Forest.**

\_\_\_\_\_                      \_\_\_\_\_  
 Date                                      Town Clerk

- c. **Administrative Fees.** The appropriate filing fees, as determined by the Board of Commissioners, shall be paid to the Town of Wake Forest, North Carolina for each submittal of an administrative final plat.

**2. Recording of Final Plat**

The subdivider shall file the approved final plat with the Register of Deeds of Wake County for recording within ninety (90) days after the date that the Town Clerk has signed the plat; otherwise, such approval shall be null and void.

**C. Regular Procedure**

**1. Master Plan**

- a. **Master Plan Submitted.** It is required that, prior to the filing of an application of a master plan, the subdivider shall schedule an appointment to meet with the Department of Planning and Department of Public Works and Utilities to discuss the proposed subdivision relative to appropriate zoning, conformance with comprehensive plans, availability of utilities, and municipal policies regarding subdivision development. The master plan shall include the proposed subdivision and physical development of the entire tract of land. The subdivider shall submit a master plan the appropriate number of days, as approved by the Board of Commissioners, prior to a regular meeting of the Planning Board. A minimum of three (3)

copies of the master plan shall be submitted for review. The master plan shall be drawn to a scale of one (1) inch to one hundred (100) feet or larger; and, shall have a maximum sheet size of twenty-four (24) by thirty-six (36) inches; and, shall follow the layout shown in Detail 1. The master plan shall be prepared by a registered land surveyor or professional engineer duly authorized under the laws of this state to prepare such plats.

**b. What the Master Plan Shall Show.** The master plan shall show the following:

- 1) ***Vicinity Map.*** A vicinity map drawn to a scale of 1" - 1000' and showing north arrow and showing the location of the subdivision in relation to neighboring tracts, subdivisions, roads and waterways.
- 2) ***Existing Conditions.***
  - a) Existing site conditions on and surrounding the tract, including topography (5' intervals), vegetation cover, soils, areas within the floodway or floodway fringe, and other environmental conditions.
  - b) The accurate location, dimensions, name, and description of all existing or recorded streets, alleys, reservations, easements, or other public rights-of-way within the subdivision, intersecting, or contiguous with its boundaries or forming such boundaries.
  - c) The accurate location, dimensions, description and flow line of existing water courses and drainage structures within the subdivision or on contiguous tracts.
  - d) The accurate location, dimensions, description and name of all existing or recorded lots, parks, public areas, permanent structures and other sites within or contiguous with the subdivision.
  - e) Existing vegetation and natural areas shall be indicated on the master plan and a written statement shall be required that these areas will be protected to the greatest extent possible and that minimum clearing of land shall be undertaken during development.
- 3) ***Boundaries.*** Surveyed boundaries of the tract including bearings and distances and the portion of the tract to be subdivided. Subdivision boundary lines shall be indicated by heavy lines.
- 4) ***Acreage.*** The total acreage to be subdivided.

- 5) ***Subdivision Name.*** Proposed name of subdivision which shall not have the same spelling as or be pronounced similar to the name of any other subdivision located within the town or within the ETJ of the town.
  - 6) ***Subdivider Information.*** Names, addresses, and telephone numbers of the subdivider, record of owner(s) of land to be subdivided, and the engineer and/or surveyor preparing the plat.
  - 7) ***Zoning and Use of Land.*** The zoning classification(s) of the tract and of adjacent properties. The existing and proposed uses of land within the subdivision and of adjacent properties.
  - 8) ***Street and Lot Layout.*** The proposed street and lot layout.
  - 9) ***Utility Layout.*** The proposed utility layout including water and sewer lines, both on-site and off-site, and storm drainage facilities.
  - 10) ***Recreation and Open Space.*** Proposed plans to comply with the active recreation open space requirements stated in Article VI., Section 6 of the Wake Forest Zoning Ordinance.
  - 11) ***Units.*** The numbers and types of residential units; and, the numbers, square footage and types of non-residential units.
  - 12) ***Common Areas.*** Planned means of providing for the organization and arrangements for the ownership, maintenance and preservation of common areas and open space.
  - 13) If a developer, corporation, private land owner or other person proposes to perform construction/filling activities in or near a lake, stream, creek tributary or any unnamed body of water and its adjacent wetlands, federal permit authorization may be required from the U. S. Army Corps of Engineers prior to commencement of earth disturbing activities. Please contact the Raleigh Field Office for a wetlands determination and specific permit requirements.
  - 14) Any other information which may be necessary for consideration in enforcing the provisions of this ordinance, the zoning ordinance, and/or other applicable town ordinances and policies.
- c. **Fee for Master Plan.** The appropriate filing fee, as determined by the Board of Commissioners, shall be paid to the Town of Wake Forest, North Carolina for each submittal of a master plan.

- d. Approval of Master Plan by Planning Board. The master plan shall be reviewed by the Planning Board.**
- 1) The staff shall review the master plan and discuss with the subdivider changes deemed advisable before the plat is submitted to the Planning Board.
  - 2) The staff shall submit the master plan to the Planning Board with their recommendations.
  - 3) The Planning Board shall review the master plan and may require the subdivider to revise the plan prior to it being submitted to the Board of Commissioners. The Planning Board shall make recommendations to the Board of Commissioners.
- e. Approval of Master Plan by the Board of Commissioners.**
- 1) The Board of Commissioners shall review the master plan with the recommendations of the Planning Board.
  - 2) The Board of Commissioners shall approve, approve conditionally or disapprove the master plan within ninety (90) days of it being submitted to them for review. Failure to so act shall be deemed as approval.
- f. Preparation of Construction Plat; Annexation.**  
Following master plan approval, the subdivider may proceed with preparation of the detailed construction plat. Any development requiring town water and/or sewer service shall be required to petition for annexation within sixty (60) days of master plan approval. If such petition is not received within this time, the master plan shall become null and void.
- g. Time Limit.** Approval of the master plan shall confer upon the subdivider the right for a two (2) year period from the date of approval that the terms and conditions under which the master plan approval was granted will not be changed for such plan. Such two (2) year period shall start from the Board of Commissioners' meeting date at which approval was granted. If the property as indicated on the master plan or portion thereof is not platted as provided herein in its entirety within the two (2) year period, the master plan or portion thereof not platted shall be subject to revision and compliance with the restrictions and requirements currently in effect. With the exception of type or intensity of use, the two (2) year provision shall not be construed to exempt or exclude applicable zoning ordinance restrictions and requirements currently in effect that are general in nature and are applicable to all property subject to land use regulation by the Town of Wake Forest.

The Board of Commissioners may approve a period exceeding two (2) years but not exceeding five (5) years where warranted in light of all relevant circumstances, including, but not limited to, the size of the development, the level of investment, the need for or desirability of the development, economic cycles, and market conditions. These determinations shall be in the sound discretion of the Board of Commissioners at the time of master plan approval.

## **2. Construction Plat**

- a. Construction Plat Submitted.** After the master plan has been approved by the Board of Commissioners, the subdivider shall submit three (3) copies of the construction plat to the Planning Department for review and approval. The construction plat may be submitted in phases. The construction plat shall be drawn to a scale of one (1) inch to one hundred (100) feet or larger; and, shall have a maximum sheet size of twenty-four (24) by thirty-six (36) inches; and, shall follow the layout shown in Detail 2. The construction plat shall be prepared by a registered land surveyor or professional engineer duly authorized under laws of this state to prepare such plats.
  
- b. Construction Plat to Conform to Master Plan.**
  - 1) The location, dimension and extent of all proposed improvements shown on the construction plat shall conform to the master plan as approved by the Board of Commissioners.
  - 2) Minor alterations that, in the opinion of the Subdivision Administrator, do not substantially deviate from the approved master plan may be allowed. Such minor alterations may include but not be limited to the relocation, dimension and extent of proposed improvements due to engineering necessity.
  - 3) Major alterations that, in the opinion of the Subdivision Administrator, do in fact involve substantial deviation from the approved master plan shall require the construction plat to be reviewed and approved in the same manner as the master plan. Major alterations may include but not be limited to the relocation, deletion, addition, dimension and extent of proposed improvements which alter: street alignment, interior arrangement, continuation and/or projection; lot and/or block dimension inconsistent with applicable requirements; increase the total number of lots; increase the volume and/or location of off-site drainage; or other condition found to be injurious to either surrounding properties or the Town of Wake Forest.
  - 4) The subdivider shall revise the master plan, as approved pursuant to B.2. above, to reflect all such minor revisions.

- c. **What the Construction Plat Shall Show.** The construction plat shall show the following:
- 1) ***Existing Property Lines and Physical Improvements.*** The location of existing and platted property lines, streets, buildings, water courses, railroads, bridges, water mains, sewers, culvert, drain pipes, any public utility easements, both on the land to be subdivided and on the land immediately joining.
  - 2) ***Boundaries.*** The boundary line of the tract to be subdivided drawn accurately to scale, will all bearings and distances shown.
  - 3) ***Natural Area.*** Any natural and peculiar conditions affecting the site.
  - 4) ***Flood Elevation Data.*** Base flood elevation data shall be provided for subdivision proposals greater than fifty (50) lots or five (5) acres, whichever is less.
  - 5) ***Names.*** The subdivision name, the names, addresses and telephone numbers of the owners, the names of adjoining property owners or subdivisions.
  - 6) ***Zoning Classification.*** Zoning classification on the land to be subdivided and on adjoining land.
  - 7) ***Date.*** Date, approximate north arrow, and scale.
  - 8) ***Proposed Street Names.*** The names, proposed location, and approximate dimensions of proposed streets, alleys, easements, parks and other open spaces, reservations, lot lines, and building lines.
  - 9) ***Proposed Utility Layouts.*** The plans for proposed utility layouts, including sanitary sewers, storm sewers, water distribution lines, natural gas, telephone and electric service, illustrating connections to existing systems. These plans may be submitted separately. Plans shall be at a scale of 1 inch = 50 feet or larger. Plans for public or community water supply systems and/or public or community sewage disposal systems excluding use of municipal systems shall be accompanied by letters of approval from the Wake County Department of Health. Plans for all public water and sewer systems shall be prepared as plan profile drawings and shall show line sizes, the location of fire hydrants, blow-offs, manholes, pumps, force mains and gate valves. Plans for individual sewage disposal systems shall be accompanied by letters of preliminary approval of the Wake County Health Department.

- 10) ***Street Plans.*** Street plans shall be prepared as plan-profile drawings. They shall be at a scale of 1 inch = 50 feet. Street plans shall show street grades and typical street sections.
- 11) ***Proposed Lot Lines.*** Proposed lot lines, lot and block numbers and approximate dimensions, proposed minimum building setback lines.
- 12) ***Contours and Interval.*** Contours with a vertical interval of two (2) feet.
- 13) ***Location Map.*** A map with a legible scale showing the location of the subdivision.
- 14) ***Recreation and Open Space.*** Proposed location and size of parks and recreation areas dedicated pursuant to Article IV, Section 6. "Active Recreation Open Space Requirements" of the Wake Forest Zoning Ordinance. If, pursuant to this section, dedication of land was approved, the construction plat shall show the area or areas for designation. If payment in lieu of dedication of land was approved, a statement to that effect shall be shown on the construction plat. In addition, all proposed locations of school sites, riding trails, natural buffers, pedestrian and bicycle paths, or other rights-of-way, utility or other easements, their location, width and purpose.
- 15) ***Soil Types.*** The plat shall be accompanied by a soils map at the same scale as the drawings showing proposed improvements.
- 16) ***Erosion Plan.*** The plat shall be accompanied by a proposed erosion control plan pursuant to the requirements of the Wake Forest Sedimentation and Erosion Control Ordinance.
- 17) ***Site Data.*** Acreage in total tract, acreage in parks, total number of parcels created, and linear feet in streets, water lines, and sewer lines.

**d. Approval of Construction Plat by Subdivision Administrator.**

The Subdivision Administrator shall review and take action on each construction plat submitted. Before taking final action on the plat, the Subdivision Administrator shall hear the reports of other public officials and agencies concerning the proposed construction plat. If the construction plat is disapproved, the Subdivision Administrator shall specify the reasons for such action in writing.

**e. Improvements, Installation of Guarantee.**

Upon approval of the construction plat by the Subdivision Administrator, the subdividers may proceed with the preparation of the final plat, and the installation or arrangement for required improvements in accordance with the approved construction plat and the requirements of this ordinance. Prior to the initiation of construction for utilities and street improvements, the subdivider shall have all necessary approvals from county, state and federal agencies and the Town of Wake Forest.

- 1) Upon approval of the construction plat by the Subdivision Administrator, the subdivider shall submit erosion plans to the Wake County Department of Environmental Health. No work may be carried out on site prior to their approval of these plans and their approval of the installation of erosion controls.
- 2) Construction plats and accompanying material must be submitted by the developer to the Wake County Health Department, NC-DHR (Division of Environmental Health), and Division of Highways of the North Carolina Department of Transportation to receive appropriate approval prior to work on site. The developer shall have all necessary approvals from State agencies and the Town of Wake Forest prior to initiation of construction plans and recording of the final plat.
- 3) Following installation of erosion controls, the developer may proceed with preparation of the final plat and installation of all required improvements in accordance with the approved construction plat and the regulations of this ordinance. In lieu of installation of such improvements, the subdivider shall provide sufficient guarantee that such improvements will be installed as follows:
  - a) ***Performance Guarantee.*** In lieu of prior construction of the improvements required by this ordinance, the subdivider shall guarantee that such improvements will be carried out according to the Town of Wake Forest's specifications at his expense. Such guarantee may be in the form of a surety bond made by a surety company licensed to do business in North Carolina or certified check drawn in favor of the Town of Wake Forest, or cash deposited with the Town of Wake Forest, or a letter of credit from a local bank for the amount of the improvements to be installed. Such guarantees shall be in an amount of not less than one hundred (100) percent nor more than one hundred twenty-five (125) percent of the estimated cost of the construction of the required improvements. This amount shall be determined by the Director of Public Works and Utilities.

Improvements must be completed by the developer within one (1) year of the approval of the performance guarantee.

- b) **Defects Guarantee.** The Town Clerk shall secure from all subdividers a letter in which said subdivider shall agree to maintain the backfill and any improvements located thereon and therein any ditch which has been dug in connection with the installation of such improvements. Such letter shall be binding on the subdivider for a period of one (1) year after the acceptance of such improvements by the Town of Wake Forest.

- 4) Following construction plat approval and prior to commencement of construction on site, the subdivider shall schedule a pre-construction conference with the Subdivision Administrator, the Director of Public Works and Utilities, and the Town Engineer. Prior to the conference, the subdivider shall submit a final construction plat consisting of one (1) reproducible mylar set which has been signed by the Subdivision Administrator, Director of Public Works and Utilities, and Town Engineer, and a minimum of three (3) paper copies.

- f. **Fee for Construction Plat.** The appropriate filing fee, as determined by the Board of Commissioners, shall be paid to the Town of Wake Forest, North Carolina for each submittal of a construction plat.

**3. Final Plat - Regular Procedure.**

All improvements must be installed or an appropriate guarantee submitted and approved prior to a final plat being approved.

- a. **Final Plat Submitted.** After the construction plat has been approved, the final plat shall be prepared and submitted for final approval. The final plat may be submitted in sections. Such owner or subdivider shall submit five (5) copies of the final plat, one (1) of these shall be drawn in ink on mylar suitable for reproduction; three (3) shall be in black or blue line prints; and one (1) shall be a transparent mylar copy; the final plat shall be prepared on sheets that have an outside margin of not more than 21" x 30" and not less than 11" x 17" drawn to a scale of not less than one (1) inch equals one hundred (100) feet.
- b. **Conformity with Construction Plat.** The final plat shall conform with the construction plat as approved and if desired by the owner or subdivider, it may constitute only that portion of the approved construction plat which he proposes to record and develop at the same time. If the final plat does not substantially conform to the construction plat as approved, the subdivision administrator may consider appropriate revision to the construction plat as provided by this ordinance.

- c. **The Installation of Improvements and Utilities is Necessary for Eligibility for Final Plat Approval.** The installation of improvements and utilities for plats is necessary before the plat shall be eligible for final approval by the Town of Wake Forest unless an appropriate bond, check, cash or letter of credit for the required improvements is provided by the subdivider.
- d. **Administrative Fees.** The appropriate filing fee, as determined by the Board of Commissioners, shall be paid to the Town of Wake Forest, North Carolina for each submittal of a final plat.
- e. **What the Final Plat Shall Show.** The final plat shall be prepared by a Registered Land Surveyor or Engineer licensed to practice in North Carolina. It shall contain the following:
  - 1) **Zoning of Tract.** Zoning classification of the land to be subdivided and of adjoining land.
  - 2) **Boundary.** The exact boundary lines of the tract to be subdivided fully, dimensioned by lengths and bearings, and the location of intersecting boundary lines of adjoining land with adjacent subdivisions identified by official maps. Also square footage and acreage of each lot.
  - 3) **Monument and Control Corners.** The accurate locations and descriptions of all monuments, markers, and control points.
  - 4) **Survey Data.** Sufficient data is determined readily and reproduced on the ground, every straight or curved boundary line, street line, lot line, right-of-way, easement line, and setback line, including dimensions, bearings, or deflection angles, radii, arcs, chords, central angles, and tangent distances for the center line of curved streets and curved property lines that are not the boundary of curve street. All dimensions shall be measured to the nearest one-hundredth (1/100th) of a foot and all angles to the nearest one-half (1/2) minute.
  - 5) **Flood Elevation Data.** Base flood elevation data shall be provided for subdivision proposals greater than fifty (50) lots or five (5) acres whichever is less.
  - 6) **Street.** The widths, and names of all proposed streets and alleys, and of all adjacent streets and alleys, and all adjacent street, alleys, and easements shall be properly located.
  - 7) **Easements.** The location of all rights-of-way, easements, and areas to be dedicated to public use with the purpose of each stated.

- 8) **Names and Vicinity Map.** The name of the owner, and surveyor, landscape architect, engineer and their respective addresses and telephone numbers. Also, the name of the subdivision and a sketch vicinity map showing relationship between subdivision and surrounding areas at a legible scale.
- 9) **Building Setback lines.** Minimum building setback lines.
- 10) **Block and Lot Numbers.** The blocks numbered consecutively throughout the entire subdivision and the lots numbered consecutively throughout each block.
- 11) **Deed Restrictions on the Property.** A statement indicating whether deed restrictions exist, the subject, and location.
- 12) **Date.** Date of the survey and plat preparation, a north arrow indicating whether true or magnetic, and graphic scale.
- 13) **Certificate Required**

**a) Certificate of Ownership and Dedication.**

I hereby certify that I am the owner of the property shown and described hereon, which is located in the subdivision jurisdiction of Wake Forest, and that I hereby adopt this plan of subdivision with my free consent, establish minimum building setback lines, and dedicate all streets, alleys, walks, parks, and other sites and easements to public or private use as noted.

\_\_\_\_\_ Date \_\_\_\_\_ Owner(s)

**b) Certificate of Survey and Accuracy**

I \_\_\_\_\_, certify that this plat was drawn under my supervision from (an actual survey made under my supervision) (Deed description recorded in Book \_\_\_\_, Page \_\_\_\_, etc.); (other); that the boundaries not surveyed are shown as broken lines plotted from information found in Book \_\_\_\_, Page \_\_\_\_; that this plat was prepared in accordance with G.S. 47\_30 as amended. Witness my original signature, registration number and seal this the \_\_\_\_ day of \_\_\_\_\_ A.D., 19 \_\_\_\_.

\_\_\_\_\_ Surveyor

(SEAL OR STAMP) \_\_\_\_\_  
Registration Number

- c) **Certificate of Notary.**  
"North Carolina, \_\_\_\_\_ County. I, a Notary Public of the County and State aforementioned, certify that \_\_\_\_\_, a Registered Land Surveyor, personally appeared before me this day and acknowledged the execution of the foregoing instrument. Witness my hand and official stamp or seal, this the \_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_.

(SEAL OR STAMP) \_\_\_\_\_  
Notary Public

My Commission expires \_\_\_\_\_

- 14) **As Built Drawings.** Prior to accepting any utilities or streets for permanent maintenance the Town of Wake Forest shall receive plan and profile drawings of all improvements as constructed. The drawings shall include but not be limited to individual services and their respective station numbers. One reproducible and two (2) copies sealed by a Professional Engineer or Registered Land Surveyor licensed to practice in North Carolina shall be required.
- 15) **Warranty and Latent Defects Guarantee.** Upon receipt of "Record Drawings" by the Town and satisfactory completion of the final inspection punch list for all facilities, utilities, streets and appurtenances for permanent maintenance, a one (1) year warranty for all improvements shall become effective. This warranty must be satisfactory to the Town of Wake Forest.

For the purpose of this section, the term "latent defect" refers to any unseen or hidden condition which becomes apparent during the one (1) year warranty period in publicly dedicated facilities, utilities, streets and appurtenances that requires repair as determined by the Director of Public Works and Utilities or his/her designee. If such latent defects appear, the warranty may be enforced regardless of whether the facilities, utilities, streets and appurtenances were constructed in accordance with this ordinance and the approved plans.

- f. **Approval of the Final Plat by the Subdivision Administrator.** The Subdivision Administrator shall review and take action on each final plat submitted. The Subdivision Administrator shall approve or disapprove the plat within thirty (30) days after it has been submitted. If the Subdivision Administrator approves the final plat, such approval shall be shown on each copy of the plat by the following signed certificate:

**Approved for Recording by the Town of Wake Forest**

\_\_\_\_\_

**Date**

\_\_\_\_\_

**Town Clerk**

If the final plat is approved, the original tracing and one (1) print shall be returned to the subdivider, and one (1) reproducible copy shall be retained by the Town of Wake Forest after recording at the Wake County Register of Deeds Office. If the final plat is disapproved, the subdivider may make such changes as will bring the final plat into compliance with this ordinance and resubmit same for reconsideration by the Subdivision Administrator.

- g. *Recording of Final Plat.*** The subdivider shall file the approved final plat with the Register of Deeds of Wake County for recording within ninety (90) days after the date that the Town Clerk has signed the plat; otherwise, such approval shall be null and void.

The subdivider shall return one (1) mylar sepia of the recorded map to the Town of Wake Forest for permanent copy.

**D. Resubdivision Procedures.**

For any replatting or resubdivision of land, the same procedures, rules, and regulations shall apply as prescribed herein for an original subdivision. Lot sizes may, however, be varied on an approved plan after recording, provided that (1) no lot or tract of land shall be created or sold that is smaller than the size shown on the approved plan; (2) drainage, easements, or rights-of-way shall not be changed; (3) street alignment and block sizes shall not be changed; (4) the property line between the back of the lots shall not be changed; (5) the rear portion of lots shall not be subdivided from the front part; and (6) the character of the area shall be maintained.

**Detail 1. Standard Master Plat Layout**

Vicinity Map			
	See Detail 1c	See Detail 1b	See Detail 1a

  

REVISIONS		
NO.	DATE	DESCRIPTION

**Detail 1a. Standard Title Block**

<p>(NAME) PHASE (NO.)</p>	<p>SUBDIVISION (REVISION NO.) Wake Forest, N.C.</p>	
Owner(s)		
Address		
Phone		
E-mail Address		
NAME OF CONSULTING ENGINEERS	SURVEYED:	APPROVED:
	DRAWN:	DATE:
	CHECKED:	SCALE:

**Detail 1b**

**RECOMMENDATION FOR APPROVAL  
BY THE WAKE FOREST  
PLANNING AND ZONING BOARD**

**DATE** \_\_\_\_\_

**Detail 1c**

**APPROVAL BY THE  
WAKE FOREST BOARD  
OF COMMISSIONERS**

**DATE** \_\_\_\_\_

**Detail 2. Standard Construction Plat Layout**

Vicinity Map			
Detail 2d	See Detail 2c	See Detail 2b	See Detail 2a
Detail 2e			

  

REVISIONS		
NO.	DATE	DESCRIPTION

**Detail 2a. Standard Title Block**

<p>(NAME) PHASE (NO.)</p>	<p>SUBDIVISION (REVISION NO.) Wake Forest, N.C.</p>	
Owner(s)		
Address		
Phone		
E-mail Address		
NAME OF CONSULTING ENGINEERS	SURVEYED:	APPROVED:
	DRAWN:	DATE:
	CHECKED:	SCALE:

**Detail 2b**

**THESE PLANS HAVE BEEN APPROVED FOR CONSTRUCTION BY THE TOWN OF WAKE FOREST.**

\_\_\_\_\_  
**Public Works and Utilities**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Engineering Department**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Fire Prevention**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Subdivision Administrator**

\_\_\_\_\_  
**Date**

\*Provide Detail 2b on all construction plat sheets.

**Detail 2c**

ALL PUBLIC FACILITIES, INCLUDING UTILITIES, SIDEWALKS, AND HANDICAP RAMPS ARE TO BE CONSTRUCTED ON ALL STREETS AS SPECIFIED BY TOWN STANDARDS. THESE FACILITIES HAVE BEEN APPROVED BY THE TOWN OF WAKE FOREST AND SHALL BE SO INSTALLED UNLESS A CHANGE IS APPROVED BY THE TOWN OF WAKE FOREST.

**Detail 2d**

**REVIEW ENGINEER DISCLAIMER**

EXECUTION OF THIS CONSTRUCTION PLAT BY THE REVIEW ENGINEER FOR THE TOWN OF WAKE FOREST IN NO WAY LIMITS THE RESPONSIBILITY OF THE OWNER AND ENGINEER OF RECORD WITH REGARD TO COMPLIANCE WITH ALL FEDERAL, STATE, AND LOCAL STANDARDS AND/OR CONDITIONS.

**Detail 2e**

**OWNER CERTIFICATE**

OWNER HEREBY CERTIFIES AND AGREES TO TAKE SUCH ACTION AS MAY BE REQUIRED BY THE TOWN OF WAKE FOREST TO CORRECT ANY ERRORS, OMISSIONS OR NON-COMPLIANCE WITH TOWN STANDARDS AND/OR CONDITIONS DESCRIBED IN THIS CONSTRUCTION PLAT, INCLUDING RE-SUBMISSION OR RE-EXECUTION OF THIS CONSTRUCTION PLAT WITH THE APPROPRIATE CORRECTIONS AND/OR REVISIONS.

\_\_\_\_\_  
Owner

\_\_\_\_\_  
Date

## ARTICLE IV. SUBDIVISION DESIGN AND STANDARDS

### A. Compliance with Official Plans.

Where a proposed subdivision includes any part of a thoroughfare which has been designated as such upon the officially adopted Thoroughfare Plan of the Town of Wake Forest, as provided for by G.S. 136-66 and G.S. 160A, paragraphs 361 and 363, respectively, such part of such thoroughfare shall be platted and dedicated by the subdivider in the location shown on the plat and at the width specified in this ordinance. Similarly, proposed subdivisions must comply in all respects with the requirements of the Zoning Ordinance of the Town of Wake Forest.

### B. Required Improvements.

Approval of the Final Plat shall be subject to the subdivider having installed or having guaranteed the installation of the following improvements:

<i>Improvements Required</i>							
	2 Acres	1 Acre	30,000 Square Feet	20,000 Square Feet	15,000 Square Feet	10, Square Feet	Multi-Family Groups
Graded Streets	•	•	•	•	•	•	•
Underground Drainage			•	•	•	•	•
Curb and Gutter				•	•	•	•
Public Water and Hydrants				•	•	•	•
Public Sewer				•	•	•	•
Paved Streets	•	•	•	•	•	•	•
Sidewalks on one side of street						•	•
Sidewalks on both sides of street		◊					•
Street lights	•	•	•	•	•	•	•
Street trees	•	•	•	•	•	•	•
Underground Wiring	•	•	•	•	•	•	•
Recreation Areas	•	•	•	•	•	•	•

◊ - See also Article IV. Section B.2

*Lots over specified sizes shall be governed by the regulations in the next highest density category. In other words, if a lot were 11,000 square feet, the regulations for 10,000 square foot lots would apply.*

**1. Streets**

- a. **Grading.** All street rights-of-way shall be graded to accommodate the necessary improvements.
  - 1) The street is centered in the right-of-way.
  - 2) Adequate shoulders and space for future sidewalks are provided.
  - 3) Allowance is made for side ditches or curbs and gutters and storm sewers for street drainage.
  - 4) Cut slopes do not exceed a ratio of 2:1.
  - 5) Fill slopes do not exceed a ratio of 2:1.
- b. **Paving.** In all cases the subdivider shall be responsible for the cost and installation of the street foundation and paving of all streets on the approval Final Plat in accordance with the specifications of the Town of Wake Forest and the Division of Highways, N. C. Department of Transportation and Highway Safety.
- c. **Street Drainage.** The subdivider shall be responsible for the cost and installation of standard 2'6" concrete curbs and gutters. Shapes of other curb may be used provided the 6" height is maintained. The concrete valley gutter is an allowable type. Any other types of gutter, will be subject to the approval of the N. C. Department of Transportation and Highway Safety's Division Engineer and the Town Manager.

**2. Sidewalks.**

Sidewalks shall be constructed on the street right-of-way and installed as required in the chart on Page 28. In addition, the subdivider shall install sidewalks on both sides of the street on all subdivision lots, regardless of size, fronting on major thoroughfares as identified on the officially adopted Wake Forest Thoroughfare Plan. Also, the subdivider shall install a sidewalk on one side of all minor thoroughfares as identified on the officially adopted Wake Forest Thoroughfare Plan and all residential collector streets. The Wake Forest Planning and Zoning Board shall determine on which side of the minor thoroughfare and residential collector street the sidewalk will be constructed.

The subdivider shall bear the expense.

**3. Driveways.**

All driveways for houses to be built in the subdivision shall be cut, graded, and paved to provide a minimum of ten (10) foot side driveway.

**4. Installation of Utilities, Storm Drainage, Street Lights and Street Trees.**

After grading of street right-of-way is completed and approved and before any base is applied, underground work to be installed such as water mains, sewerage mains and taps shall be installed by the developer and approved by the Town Manager and Utilities Director.

a. **Water Supply System.** The subdivider shall connect the subdivision with the municipal water system at his expense, and shall construct it in such a manner as to serve adequately for both domestic use and for fire protection on all lots shown on the Subdivision Plat according to the following schedule:

- 1) If the preliminary plat includes between five (5) and twenty (20) lots, it shall be connected to the Wake Forest water system if any part of the subdivision lies within 300 feet of the municipal system.
- 2) If the preliminary plat includes between twenty-one (21) and fifty (50) lots, it shall be connected to the Wake Forest water system if any part of the subdivision lies within 500 feet of the municipal system.
- 3) If the preliminary plat includes between fifty-one (51) and one hundred (100) lots, it shall be connected to the Wake Forest Water System if any part of the subdivision lies within 1,000 feet of the municipal system.
- 4) If the preliminary plat includes between more than one hundred (100) lots, it shall connect to the Wake Forest water system regardless of its distance from the municipal system.
- 5) Where a subdivision lies more than the distances stated earlier from the municipal water system, the subdivider may, at his expense, connect the subdivision lots to the aforementioned system.

The size of water mains shall be at least six (6) inches. Fire hydrants shall be installed in accordance with requirements of the fire underwriters. The location and types of valves and hydrants, the amount of soil cover over the pipes, and other features of the installation shall be approved by the Utilities Director and shall conform to accepted standards of good practice for municipal water systems. If the developer provides a community water system rather than connecting to the municipal system or provides individual well(s), the materials, design and installation shall be made in accordance with specifications and standards of the Town of Wake Forest and subject to approval by the Division of Health Services, North Carolina Department of Human Resources, the Division of Environmental Management, North Carolina Department of Natural and Economic Resources.

b. **Sanitary Sewers.** The subdivider shall be required to connect his subdivision with the municipal sewage system at his expense according to the following schedule:

- 1) If the preliminary plat includes between five (5) and twenty (20) lots, it shall be connected to the Wake Forest water system if any part of the subdivision lies within 300 feet of the municipal system.
- 2) If the preliminary plat includes between twenty-one (21) and fifty (50) lots, it shall be connected to the Wake Forest water system if any part of the subdivision lies within 500 feet of the municipal system.
- 3) If the preliminary plat includes between fifty-one (51) and one hundred (100) lots, it shall be connected to the Wake Forest Water System if any part of the subdivision lies within 1,000 feet of the municipal system.
- 4) If the preliminary plat includes between more than one hundred (100) lots, it shall connect to the Wake Forest water system regardless of its distance from the municipal system.

The subdivider shall bear the entire cost of the installation and materials for the sanitary sewers within his subdivision. Sewer connections shall comply with the regulations of the Division of Health Services, North Carolina Department of Human Resources and shall be constructed under the supervision and approval of the Utilities Director and the Town Manager. All sewerage lateral collection lines shall be at least eight (8) inches in diameter. Where lots cannot be economically connected with a public sewerage system, they must conform to the lot area requirements of the Wake County Health Department.

c. ***Storm Drainage.*** The subdivision shall provide an adequate drainage system, including necessary open ditches, pipes culverts, drop inlets, bridges, fill-in lots, etc. for the proper drainage of all surface water. The subdivider shall connect to the Wake Forest storm drainage system where available; if not accessible, the subdivider shall provide open drainage ditches necessary to carry the water in a manner approved by the Utilities Director.

- 1) All storm drainage shall be adequate to carry "flood flows" of the following frequency:

Storm Sewer Collection - 10 years  
Cross drainage - 25 years

- 2) All surface drainage courses shall have at least 3:1 slide slope (on side slopes) having at least three (3) feet of horizontal distance for each one (1) foot of vertical drop.

- 3) The minimum grade along the bottom of a surface drainage course shall be a slope of three-tenths (0.3%) (or a vertical fall of approximately one (1) foot in each three hundred (300) feet of horizontal length.) No surface water shall be channeled or directed into a sanitary sewer.
  - 4) Cross pipes under streets shall be reinforced concrete or bituminous coated corrugated metal.
  - 5) Culverts shall be provided to accommodate all natural water flow and shall be of sufficient length to permit full width roadway and the required slopes. The size openings to be provided shall be determined by the Utilities Director, but in no case shall be less than twelve (1) inches. Cross drains shall be built on straight line and grade and shall be laid with the ends filled and matched to provide tight joints and a smooth uniform invert. They shall be placed at a sufficient depth below the roadbed to avoid dangerous pressure of impact, and generally the top of the pipe should be at least one (1) foot below the roadbed; however, in a case where the pipe is not more than one (1) foot below the roadbed surface, the pipe shall be reinforced with concrete.
- d. ***Oversized Improvements and Reimbursements.*** Where the Town Board deems it necessary, in the interest of the health, safety, and general welfare of the residents of Wake Forest, the subdivider shall make certain improvements at sizes in excess of those which would normally be required to serve only his subdivision. Where such oversized improvements are required, the subdivider shall be reimbursed for costs incurred over and above those required to serve his subdivision, according to the Town of Wake Forest's officially adopted water and sewer extension policy.
  - e. ***Electrical, Telephone and Cablevision Services.*** Underground wiring shall be required as provided in the chart on page 28.
  - f. ***Street Signs.*** Appropriate street name signs which meet standard municipal specifications shall be placed at all street intersections, and names shall not duplicate existing street names. The subdivider shall bear the expense.
  - g. ***Street Trees and Trees on Building Lots.*** Street trees shall be required as provided in the chart on page 28. The Planning and Zoning Board will assist the subdivider in the location of trees and identification of species to use under varying conditions.
  - h. ***Street Lights.*** The subdivider shall install and bear the expense of street lighting in each new subdivision in accordance with the chart on page 28 and to comply with requirements established by the Utilities Director.

i. ***Permanent Reference Points***

- 1) ***General.*** Prior to the approval of the Final Plat, the following survey reference markers shall be installed.
- 2) ***Permanent Concrete Monuments.*** Permanent concrete monuments four (4) inches in diameter or square, three (3) feet long, shall be placed at not less than two (2) corners of the subdivision and at all corners of all intersections, provided that additional monuments shall be placed where necessary so that no point within the subdivision lies more than 500 feet from a monument. Two or more of the required monuments shall be designated as control corners. The top of each monument shall have an indented cross, metal pin, or metal plate to identify properly the location of the point. All monuments shall be shown on the Final Plat.
- 3) ***Markers.*** All lot corners, all points where the street lines intersect the exterior boundaries of the subdivision, and all angle points and points of curve in each street shall be marked with iron pipe either three-fourths (3/4) inches or one (1) inch in diameter and eighteen (18) - twenty-four (24) inches long, driven so as to be within one (1) inch of finished grade.
- 4) ***Property Corner Tie.*** One or more corners of the subdivision shall, by a system of azimuths or courses and distances, be accurately tied to a monument of some United States or State Agency Survey System, such as the United States Coast and Geodetic Survey Systems, where such monument is within 2,000 feet of said corner. Where the North Carolina Grid System coordinates of said monument have been published by the North Carolina Department of Natural and Economic Resources, the coordinates of the referenced corner shall be computed and shown X and Y ordinates on the map. Where such a monument is not available, the tie shall be made to some pertinent and permanent recognizable landmark or identifiable point.
- 5) ***Accuracy.*** The angular error of closure shall not exceed twenty-five (25) seconds times the square root of the number of angles turned. The linear error of closure shall not exceed one (1) foot per ten thousand (10,000) feet of perimeter of the lot or tract of land. The accuracy of the survey shall be designated on the Final Plat.

5. **Open Space, Recreation and Parks Dedication.**

Refer to Article VI, Section 6 of the Wake Forest Zoning Ordinance.

**C. Minimum Standards of Design.**

The following shall be considered the minimum standards of design for subdivisions within the Wake Forest Planning Area.

**1. Streets**

- a. **General.** In every new subdivision, the street system shall conform to the Wake Forest Thoroughfare Plan. In areas where the Thoroughfare Plan does not apply, streets shall be designed and located in proper relation to existing and proposed streets, to the topography, to such natural features as streams and tree growth, to public safety and convenience, and to the proposed use of land to be served by such streets. All proposed streets shall provide for the appropriate projection of principal streets in surrounding areas and provide reasonable access for surrounding acreage tracts.
- b. **Right-of-Way Widths.** Minimum street right-of-way widths shall be in accordance with the Thoroughfare Plan and shall not be less than the following:

Major Thoroughfare	90 feet
Minor Thoroughfare	70 feet
Local Street	60 feet or 50 feet with curb and gutter
Cul-de-Sac	60 feet or 50 feet with curb and gutter
Cul-de-Sac Turn-arounds	100 feet (diameter)
Frontage Road	60 feet or 50 feet with curb and gutter

Subdivisions along existing streets of inadequate right-of-way shall provide additional right-of-way to meet the minimum widths specified above. The entire right-of-way shall be provided where any part of a new subdivision is on both sides of an existing street, and one-half the required right-of-way measured from the center line of the existing street shall be provided where a new subdivision is located only on one side of an existing street.

- c. **Pavements Widths.** Minimum pavement width, measured from back of curb to back of curb, shall not be less than the following and shall be in accordance with cross sections designated in the Thoroughfare Plan.

	Existing Streets Improvement Policy	New Street Subdivision Regulations
Major Thoroughfare	a	52 <sup>b</sup>
Minor Thoroughfare	a	45 <sup>b</sup>
Residential Collector <sup>c,e</sup>	32' (20')	35' (20')
Local Residential <sup>d,e</sup>	27' (20')	27' (20')
Turnaround (diameter) <sup>e</sup>	75' (20')	75' (20')
Frontage Road <sup>e</sup>	27' (20')	27' (20')

**NOTES:**

*a. Widening of streets in existing neighborhoods will be considered on a case-by-case basis, taking into consideration the effects on the neighborhood and the traffic and parking requirements.*

*b. The design or cross section of thoroughfares may vary from the minimum standard upon recommendation for specific situations.*

*c. A Residential Collector Street is a local access street which serves as a connector between local streets and the thoroughfare system, collecting traffic from 100 to 400 dwelling units. Residential collector streets will be designated as subdivisions are submitted for review and approval.*

*d. Local Residential Subdivision Streets are defined as being either cul-de-sacs, loop streets less than 2,500 feet in length, streets less than one mile in length that do not connect thoroughfares or serve major traffic generators and do not collect traffic from more than one hundred (100) dwelling units.*

*e. Width for shoulder/swale section where appropriate is shown. No on-street parking would be permissible for this cross section. This design would only be appropriate for low density development.*

- d. *Paving Standards.*** Shown below are minimum thicknesses of base and surface course to be used. Design shall be chosen from Group 1 or Group 2 depending on sub-grade soil type.

**GROUP 1**

Good to Excellent		
Sub-Grade Soil Types	Base Course	Pavement Surface
A-1-a, A-1-b, A-3	7" STBC, Type A or C	2" SA or 1-2
A-2-4, A-2-5, A-3-6	9" STBC, Type A or C	1-1/2" SA or 1-2
A-2-7	8" CABC or STBC, Type B	BST, 1" SA or 1-2
	6" CABC or STBC, Type B	1-1/2" SA or 1-2
	3" BCBC, Type HB	1-1/2" SA or 1-2
	3-1/2" BCBC, Type HB	1" SA or 1-2
		5" Plain Concrete

## GROUP 2

Poor to Fair		
Sub-Grade Soil Types	Base Course	Pavement Surface
A-4, A-5, A-6, A-7-5,	9" STBC, Type A or C	2" SA or 1-2
A-7-6	8" CABC or STBC, Type B	1-1/2" SA or 1-2
	10" CABC or STBC, Type B	BST, 1" SA or 1-2
	4" BCBC, Type HB	1-1/2" SA or 1-2
	3" BCBC, Type HB	2" SA or 1-2 6" Plain Concrete

\*Any other pavement design must be reviewed by the Division Engineer on an individual basis and approval will be based upon sound engineering principles.

**NOTE:**

*Sub-grade: No base course shall be placed on muck, pine clay, vegetable matter or other unsuitable material.*

*CABC: Aggregate Base Course, No. 7*

*STBC: Soil Type Base Course*

*BST: Bituminous Surface Treatment*

*SA: Sand Asphalt, Type F-1*

*1-2: Bituminous Concrete Surface Course, Type 1-2*

*BCBC: Bituminous Concrete Base Course, Type HB*

Other base courses such as various cement-treated materials may be used in lieu of those shown above. These materials shall be of sufficient thickness to provide equivalent strength. However, any design other than those shown above must be approved prior to use. The total thickness of the pavement structure shall in no case be less than 5".

- e. **Grades.** Unless necessitated by exceptional topography and subject to the approval of the consulting engineer for the Town of Wake Forest and the Planning and Zoning Board, street grades shall not exceed eight (8%) percent unless they are to be maintained by the North Carolina Department of Transportation and Highway Safety in which case the street grade shall not exceed seven (7%) percent. In all cases, street grades shall not be less than one (1%) percent on any street.
  - 1) Grades approaching intersections shall not exceed five (5%) percent for a distance of not less than one hundred (100) feet from the center line of said intersection.
  - 2) Street grades shall be established wherever practicable in such a manner as to avoid excessive grading, the promiscuous removal of ground cover and tree growth, and general leveling of the topography.

3) All changes in street grade shall be connected by vertical curve of at least one hundred (100) feet, or the equivalent, in feet, rounded upward to even multiples of 50, of the value of K (a constant) times the absolute value of arithmetic difference of the two grades in percent, whichever is greater. Values of K are determined from the following table:

Street Type	Value of K by Type of Curve	
	Sag	Crest
Major Thoroughfare	140	240
Minor Thoroughfare	100	150
Local Street	50	50
Cul-de-sac	50	50
Frontage Road	70	80

4) Grading and filling shall be undertaken to insure that:

- a) The street is centered in the right-of-way.
- b) Adequate shoulders and space for future sidewalks are provided.
- c) Allowance is made for side ditches or curbs and gutters and storm sewers for street drainage.
- c) Cut slopes do not exceed a ratio of 2:1.
- d) Fill slopes do not exceed a ratio of 3:1 for shoulder sections or 2:1 for curb and gutter sections.
- f) Ditch front slopes do not exceed a ratio of 4:1 for shoulder sections.

f. **Superelevation.** Superelevation for shoulder section shall not exceed .08 feet/foot of width for curb and gutter section shall not be less than .02 feet/foot of width nor more than .06 feet/foot of width.

g. **Radii of Curvature.** Where a street centerline deflection of five degrees or more than five (5) degrees occurs, a curve shall be introduced having a radius of curvature on said center line of not less than the following:

Major Thoroughfare	850 feet
Minor Thoroughfare	500 feet
Minor Streets	300 feet

- h. **Tangents.** A tangent of not less than one hundred (100) feet shall be provided between reverse curves on all streets.
- i. **Intersections.** Street intersections shall be laid out in the following manner:
  - 1) No more than two streets shall intersect at a point.
  - 2) Streets shall intersect as nearly as possible at right angles, and no street shall intersect any other street at an angle of less than sixty (60) degrees.
  - 3) Intersections with major thoroughfares shall be at least eight hundred (800) feet apart, measured from center line to center line. This requirement may be waived by the Planning Board if such requirement would prevent a property owner fronting on a major thoroughfare from having access to such a facility.
  - 4) Street jobs with center line offsets of less than one hundred twenty-five (125) feet shall be prohibited.
  - 5) Property lines at street intersections shall be rounded with a minimum radius of twenty (20) feet. At an angle of intersection less than seventy-five degrees, a greater radius may be required.
- j. **Cul-de-sac.** Permanent dead-end streets or cul-de-sac shall be no longer than eight hundred (800) feet. In general, streets with one end permanently closed shall be avoided unless the design of the subdivision and the existing or proposed street system in the surrounding area clearly indicate that a through street is not essential in the location of the proposed cul-de-sac.
- k. **Alleys.** The Planning and Zoning Board may require the subdivider to construct alleys in commercial and industrial zoning districts.

When so required, or proposed by the subdivider, alleys shall conform to the following specifications:

Right-of-way Width	20 feet
Property line radius at alley intersections	20 feet
Minimum radius to centerline when a deflection angle of More Than Ten Degrees Occurs	35 feet

- l. **Curb and Gutter.** Curbs and gutters shall meet the Division of Highway's standards:

- 1) The standard 2'6" concrete curb and gutter is the preferred type to be used. Shapes of other curb may be used provided the 6" height is maintained.
  - 2) The concrete valley gutter is an allowable type.
  - 3) Any other types of gutter will be subject to the approval of the Division Engineer after review on an individual basis. If the street is to be maintained by the Town of Wake Forest, the Public Works Director shall be consulted for approval of the gutter type. Approval in both cases will be subject to the terrain factors in the area under study as they relate to potential maintenance problems.
  - 4) The curbs and gutters shall meet the requirements of the Division of Highways of the North Carolina Department of Transportation's Guidelines for Curb Cuts and Ramps for Handicapped Persons.
- m. **Frontage Roads.** Where a tract of land to be subdivided adjoins a Major Thoroughfare, the Planning and Zoning Board shall, wherever possible, require that lots which would otherwise abut the thoroughfare be provided with frontage on a frontage road.
- n. **Street Names.** Street names shall be subject to the approval of the Planning and Zoning Board. New names shall not duplicate or be similar to existing street names. Existing street names, however, shall be projected where appropriate.

## 2. Blocks

- a. **Proposed Use.** Blocks shall be laid out with special consideration given to the type of land use proposed within the block.
- b. **Length.** Blocks shall not exceed one thousand (1,000) feet in length nor shall they be less than four hundred (400) feet in length, as measured from center line to center line.
- c. **Width.** Blocks shall have sufficient width to provide for two (2) tiers of lots of appropriate depth except where otherwise required to separate residential development from through traffic.
- d. **Crosswalk.** A pedestrian crosswalk not less than ten (10) feet in width may be required near the center and entirely across any block nine hundred (900) feet or more in length where deemed essential, by the Planning and Zoning Board, to provide adequate access to schools.

**3. Lots and Setbacks**

- a. **Size.** All lots shall conform to the dimensional and area requirements of the Zoning Ordinance of the Town of Wake Forest, but in no case shall a lot be less than 8,000 square feet and not less than 65 feet at the building setback line. Residential lots which are not served by the municipal sewer and water system or other community water and sewer systems approved by the Division of Health Services of the North Carolina Department of Human Resources and the Division of Environmental Management of the North Carolina Department of Natural and Economic Resources shall be no less than 100 feet wide at the building setback line and no less than 30,000 square feet in area. Lots with municipal water but not sewer shall be not less than 100 feet wide at the building setback line and no less than 20,000 square feet.
- b. **Setbacks.** All lots shall conform to the building setback and yard requirements of the Zoning Ordinance of the Town of Wake Forest.
- c. **Access.** Every lot shall abut a public street which has a minimum right-of-way width of at least sixty (60) feet or fifty (50) feet if the street is to have curbs and gutters.
- d. **Orientation.** Side lot lines shall normally be perpendicular or radial to street right-of-way lines.

**4. Easements and Dedications.**

These shall apply both inside the corporate limits and within one (1) miles in all directions of the corporate limits.

- a. **Utility Easements.** The subdivider shall convey easements to the Town for both underground and overhead utility installation where needed. Easements shall be at least fifteen (15) feet wide and shall be centered along rear or side lot lines. Wider easements may be required if the topography along the proposed right-of-way is such that maintenance equipment cannot reasonably operate within the minimum fifteen (15) foot wide easement.
- b. **Drainage Easements.** Where a subdivision is traversed by a water course, drainageway channel, underground storm drain, the subdivider shall dedicate to the Town a drainage maintenance easement a minimum of 15 feet wide located paralleling both sides of any water course or drainage channel or 30 feet wide paralleling any storm drainage.
- c. **Pedestrian Easements or Walkways.** **Pedestrian easements or** walkways shall be provided through the interior of blocks where the Planning and Zoning Board determines such easements are needed. Pedestrian easements shall be at least ten (10) feet wide and shall be laid out along front, side or rear property lines.

**5. Potential Flood Hazards.**

All subdivision proposals shall be consistent with the need to minimize flood damage. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage. All subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

*This the 10th day of October, 1974.*

**Moved by:** Thomas J. Byrne

**Seconded:** John B. Cole

John D. Lyon

Mayor

**Approved as to form:**

Ellis Nassif

Town Attorney

**Attest:**

Julian B. Prosser, Jr.

Town Clerk