

4 - Required Improvements & Design Standards

4.1 Purpose

The following section shall include the improvements required for any development occurring within the City of Archdale's Zoning Jurisdiction.

4.2 Construction Development Guidelines

This section makes reference to the City of Archdale's Construction Development Guidelines – a set of documents contained outside of this ordinance.

4.3 Standards for Utilities

Standards for the design and installation of public utilities shall be in accordance with the Design Standards for Utilities and Streets as described in the City of Archdale Construction and Development Guidelines. Electrical, cable, telephone, and other utility lines shall be installed underground unless the TRC determines underground installation is inappropriate.

4.4 Street Network

4.4.1 Blocks

The purpose of this subsection is to discourage long blocks lined with homes and other buildings, which reduces street connectivity and diminishes the efficiency of public and safety services, while increasing distances between residences and non-residential destinations or public gathering places. The maximum length of any blocks within a subdivision shall not exceed that as shown in Table 4.4.1. Block length shall be measured from the centerline of an intersecting street to the centerline of the next intersecting street or the center point of the terminus of the street.

Table 4.4.1 - Block Length Requirements

Zoning District	Maximum Length (in feet)
R-40	N/A
R-15, R-12.5, R-10	1,800
M-1, M-2	N/A
PUD	1,500

4.4.2 Standards for Street Design

Public and/or private streets shall be designed in accordance with the accepted Design Standards for Utilities and Streets as described in the City of Archdale's Construction and Development Guidelines.

4.4.3 Standards for Sidewalks

- a. Sidewalks shall have profiles drawn for residential collector type streets, having a minimum width of 28 feet from face of curb to face of curb. Given the nature of these streets, sidewalks

shall be required on both sides of the street. This will reduce the possibility of pedestrian crossing accidents.

- b. Sidewalks shall have profiles drawn for local streets having a minimum width of less than 28 feet face of curb to face of curb. Sidewalks will only be required on one side of the street. Sidewalks shall continue around the entire cul-de-sac providing access to all lots located within it.
- c. Sidewalks shall be required in all business districts.
- d. All sidewalks shall be a minimum 5 feet in width and 4 inches thick and shall be constructed as specified in the Construction and Development Guidelines.

4.4.4 Standards for Street Lighting

Decorative street lights are mandatory in all newly-platted subdivisions. All public streets require an outdoor street lighting plan that shall be designed in accordance with the accepted Street Lighting standards described in the City of Archdale Construction and Development Guidelines. All decorative fixtures shall be located in the public right-of-way in a manner so as not to interfere with pedestrian or vehicular traffic.

4.4.5 Traffic Impact Analysis

- a. Developments containing 50 dwelling units or more must provide a Traffic Impact Analysis (TIA) administered by a Certified Traffic Engineer. The Planning and Zoning Board and City Council retain the authority to require a TIA in developments below 50 dwelling units as they deem necessary.
- b. The report shall document the traffic operational impacts on the key roadway segments and intersections that have been identified as the primary accesses to the proposed development.
- c. The applicant must present the traffic impact study to the TRC for approval prior to review by the Planning and Zoning Board and City Council.

4.5 Greenways

4.5.1 Standards for Greenways

- a. Greenways and connectors shall be planned pursuant to the designated circulation system shown on the City's Pedestrian Network Plan.
- b. Greenway stubs must extend to the neighboring property line.
- c. Developments that adjoin future greenways must provide a connection trail to the said greenways.
- d. Greenways shall be a minimum of 10 feet wide.
- e. Maintenance is limited to a minimum removal and avoidance of hazards, nuisances, or unhealthy conditions.
- f. Construction standards can be found in the Construction Development Guidelines.

4.6 Lot Design

4.6.1 Minimum Lot Standards

- a. The provisions of this Section shall apply to any newly created or proposed lot or parcel resulting from a subdivision of land as provided for in this Ordinance.
- b. Lots shall meet or exceed zoning district standards and shall be designed for their potential uses, so that adequate buildable area is provided and adequate room for required setbacks and buffer yards will exist on the lot.

4.6.2 Lot Frontage Requirements

- a. Unless otherwise permitted herein, every lot resulting from a subdivision of land as provided for in this Ordinance shall abut and have direct access to a publicly maintained street or other public right-of-way legally dedicated, except as provided in this Section.
- b. For proposed subdivisions with frontage on a thoroughfare street, the maximum number of lots to be created shall be limited to 5 lots. Any proposed subdivision proposing more than 5 lots shall require the additional lots to be served by a newly constructed internal public street.
- c. Frontage on a public street shall not be required in the following situations; provided, however, that an easement or other right-of-way arising out of operation of law providing access to the public street shall be recorded and submitted with the application for development approval:
 - i. Parcels within non-residential subdivisions
 - ii. Multi-family lots where the individual lots are separated from a public right-of-way by a strip of land under common ownership by the owners of the multi-family lots, and/or
 - iii. Lots fronting on approved private streets.
- d. A lot of record existing on January 1, 2001 without public street frontage may be subdivided once provided that the created lot meets all other zoning district lot standards. The created lot may only be developed for one single-family residence and may not be subdivided. When a private easement serving the lot, parcel, or tract is acquired from intervening property owners, such easement shall be in compliance with the following requirements:
 - i. The easement must have a minimum continuous width of 25 feet.
 - ii. The recorded documents creating the easement shall specify that public service, utility, and emergency personnel and vehicles shall have freedom of ingress and egress from the property.
 - iii. The recorded documents creating the easement shall also specify that utilities (i.e., natural gas, electricity, telephone, cable) may be installed within the easement.
 - iv. The recorded documents creating the easement shall also include a statement specifying the party responsible for maintaining the easement and its traveled surface.
 - v. The easement must have an all-weather surface of gravel, concrete, or asphalt with a minimum continuous width of 12 feet and a minimum overhead clearance of 14 feet to ensure access of public service, utility, and emergency personnel and vehicles.
 - vi. The grantor and grantee of the easement will agree to continuously keep the easement free and clear of any-and-all obstructions that would in any way impede vehicular traffic.
- e. Lots shall be designed with adequate frontage for the purpose of providing direct physical access to the property from public streets for vehicles and utilities and for public safety equipment.

4.6.3 Flag Lots

- a. Flag lots may be developed on a limited basis in subdivisions where individual development of each lot is contemplated and the Administrator determines that no future street access through the property will be needed. Flag lots may be used to better use irregularly shaped properties or sites with physical limitations, or to eliminate or reduce access to a thoroughfare or collector street. Flag lots shall not be permitted in any proposed Subdivision except as provided for in this Section.
- b. The maximum number of flag lots shall be set forth in the below Table, where the Administrator finds that the flag lot(s):
 - i. Allow for the more efficient use of irregularly shaped parcels of land, or;
 - ii. Where the integrated nature of multiple buildings on a site dictates the need for such lots.

- c. The minimum width of the “pole” portion of a flag lot shall be the minimum public street frontage of 25 feet as established in this article.

Table 4.6.3 - Maximum Number of Flag Lots

Size of Subdivision	Maximum Number or Ratio of Flag Lots
2 – 20 lots	1 lot
Over 20 lots	1 per every 20 lots

- i. This table does not apply to the R-40 District. The R-40 district does not have a limit on the number of flag lots.
- ii. The Administrator may approve additional flag lots if evidence is presented that physical hardships prevent development of land using conventional lot design.

4.6.4 Cul-de-sac Lots

A lot located on a cul-de-sac that does not maintain the minimum required width along the public street frontage shall provide:

- i. Lot frontage of at least 50% of the minimum required, but in no case less than 25 feet,
- ii. Lot area equal to or greater than the minimum lot area (if one is specified), and
- iii. The minimum required lot width at the building line.

4.6.5 Corner Lots

Side lot lines of lots abutting a public or private right-of-way shall, to the extent practicable:

- i. Run at right angles to the right-of-way line, or
- ii. In the case of cul-de-sacs or curvilinear street rights-of-way, radial to the curve.

4.6.6 Thoroughfare Buffer Yard for Major Residential Subdivision

- a. A buffer yard shall be required along the perimeter of a major residential subdivision in order to separate residential lots from abutting thoroughfares and abutting non-residential uses.
- b. The buffer yard for abutting non-residential uses shall be designed and landscaped per Article X of the Zoning Ordinance.
- c. All required buffer yards shall be platted as common areas and may be included as “open space.”

4.7 Cluster Development

4.7.1 Cluster Development - Maximum Number of Lots

- a. The maximum number of lots that may be created in a cluster development shall be computed from the gross area of land to be developed, subtract 20% that represents the approximate area needed for roadways.
- b. Divide the remainder by the minimum lot area requirement for single-family dwellings of the zoning district where the development is located.

- c. The result is the maximum number of lots that may be created in the development. The 20% factor shall be constant regardless of the actual amount of land used for the street system.

4.7.2 Cluster Development - Minimum Standards for Lots

- a. A cluster development with approved utility systems, including wells and septic tank systems, shall be exempt from the minimum lot sizes specified in the Zoning Ordinance except as required in Table 4.8.4. In no case, shall the lot size be less than 75% of the minimum zoning lot size.
- b. At least 20% of the total project area shall be set aside as common open space.
- c. Minimum lot width and structure setbacks for the zoning district may also be reduced by 25% and may be increased if additional land area is devoted to common open space. For every additional 1% of land area devoted to common open space, above the required 20%, a 1% decrease in the minimum dimensional requirements shall be allowed.
- d. In no event shall these dimensional reductions exceed 50% of the zoning district requirements.

4.7.3 Cluster Development - Open Space Designation

- a. All land set aside to meet the required open space standards for cluster development shall be designated as parks or open space.
- b. Such parks or open space shall be deeded to the City of Archdale or held in nonprofit corporate ownership by the owners of lots within the development.
- c. In consideration of the purposes served by a cluster development, the title to such areas as provided shall be preserved to the perpetual benefit of the public generally or the private properties in the development and shall be restricted against private ownership for any other purposes.
- d. Improvements clearly incidental to the purpose of these provisions (i.e. greenways, benches, etc.) may be made within the open space provided that the maximum coverage of such improvements shall not exceed 25% of the open space.

4.8 Open Space

4.8.1 Connection to Public Open Space

- a. The Administrator may require connection to a community open space network and/or trails system if the proposed development is adjacent to the boundary of a trail and/or established recreational facility.
- b. The open space/trail system shall be maintained by the applicant or subsequent owners. The applicant may request to publicly dedicate any trail that may advance the creation of a city-wide greenway trails system.

4.8.2 Preservation of Open Space

- a. Required open space shall be reserved for any Major Subdivision of land within the zoning districts set forth in column "A" of Table 4.8.4 based upon the percentage of net acres in the proposed development corresponding the zoning district as set forth in column "B" in the same table.
- b. Subdivisions with less than 25 dwelling lots shall be exempt from the requirements of this Section.
- c. Open-space areas shall be maintained so that their use and enjoyment as open space are not diminished or destroyed. Open-space areas may be owned, preserved, and maintained as determined by the City Council by any of the following mechanisms or combinations thereof:

- i. Dedication of open space to the City, an appropriate public agency, or a non-profit entity (such as a land conservancy) if such an agency or entity is willing to accept the dedication and is financially capable of maintaining such open space.
- ii. Common ownership of the open space by an Owner's Association that assumes full responsibility for its maintenance. The restrictive covenants shall provide that, in the event the Owner's Association fails to maintain the open space according to the standards of this Ordinance, the City may, following reasonable notice:
 1. Demand that deficiency of maintenance be corrected; or
 2. Enter the open space to maintain same. The cost of such maintenance shall be charged to the Owner's Association.

4.8.3 Open Space Characteristics

Land designated as open space shall be maintained as open space and may not be separately sold, subdivided, or developed.

4.8.4 Required Open Space for Subdivisions

Table 4.8.4 - Required Open Space for Subdivisions

(A) Zoning District(s)	(B) Required Percentage of Open Space	(C) Required Percentage of Open Space for Cluster Developments	(D) Maximum Percent in Inaccessible and Unusable Land*
R-40	N/A	20%	N/A
R-15, R-12.5 R-10	8% (0 - 2 units per acre)** 10% (2.1 - 4 units per acre)** 12% (greater than 4 units per acre)**	20%	25%
B-1, B-2, O-I, HB	N/A	N/A	N/A
GRD, RAH	See Article VI of the Zoning Ordinance	See Article VI of the Zoning Ordinance	See Article VI of the Zoning Ordinance
M-1, M-2	N/A	N/A	N/A
PUD	25%	N/A	25%

- a. The terms "Inaccessible or Unusable Land*" shall include:
 - i. Any land where no zoning and/or building construction permits may be issued (such as dedicated easements and rights-of-way (except those existing to only protect underground utilities such as water or sewer lines), wetlands, bodies of water, etc. as determined by the Administrator); or
 - ii. Land with a post-development slope greater than 3:1 that severely limits its usefulness as open space.
 - iii. Land that is located within floodway areas.

- b. Based on the proposed density of the project subject to the maximum density of the respective zoning district.

4.8.5 Spacing and Dimensional Limitations

In order to ensure that all designated open space has suitable size, location, dimension, topography, and general character, and proper road and/or pedestrian access, as may be appropriate, to be usable open space, the following standards shall apply:

- i. Open space should be within ½ of a mile from any lot upon which a dwelling is intended to be built,
- ii. The minimum dimension for usable open space shall be 15 feet of width, and
- iii. The percentage of open space comprised of inaccessible or unusable land as defined in the table 4.8.4 shall not exceed the amount set forth in column (D) of the same table.

4.8.6 Access to Open Space

- a. All areas to be preserved for open space are to be accessible to pedestrians by one of the following:
 - i. Frontage (width as required in this Section) on a public street right-of-way
 - ii. Recorded pedestrian easement (min. 25 feet wide), or
 - iii. Fee simple property.
- b. Upon review of the design by the Administrator, additional pedestrian access points may be required.

4.9 Fee-in-Lieu of Improvements

- a. Where it is determined by the City Council that the construction of public improvements would not be feasible, the City may accept a fee paid in lieu.
- b. Payments-in-lieu of dedication shall be approved as part of the Preliminary Plat.
- c. A combination of public improvements and payments-in-lieu of dedication may be permitted
- d. If, at the option of the City Council, it is determined that a cash dedication shall be made for sidewalk or greenway improvements, said cash shall be paid to the City Finance Director and shall be deposited into a special Pedestrian Network Improvement Fund prior to Final Plat approval. Money in the fund, including accrued interest, shall be expended solely for acquisition, development, or rehabilitation of sidewalks and greenways.
- e. The value of such payment shall be equal to the value of the length of sidewalk or greenway required by the Pedestrian Network Plan.
- f. Collected fees for sidewalks and greenways shall be appropriated by the City for a specific project to serve residents of the subdivision in a budgetary year within 7 years upon receipt of payments or within 7 years after the issuance of building permits on ½ of the lots created by the subdivision, whichever occurs later. If such fees are not so committed, these fees shall be distributed and paid to the owners record owners of the subdivision, in the same proportion that the size of their lots bears to the total area of all lots in the subdivision.
- g. For fees paid in lieu of open space dedication, the value of such payment shall be the pre-development tax value for the amount of dedicated land from the parcel from which the open space is being dedicated as required and the cash value of the minimum required financial investment for active open space improvements. The specified contribution shall be determined by the tax value at the time Final Plat approval is granted. Such tax value shall consider zoning

district changes that occur at any time up until Final Plat approval. Tax deferrals of any kind shall not be used in the calculation of the fees.

- h. If, at the option of the City Council it is determined that a cash dedication shall be made in lieu of open space, said cash shall be paid to the City Finance Director and shall be deposited into a special Parks and Recreation Service Area fund prior to Final Plat approval. Money in the fund, including accrued interest, shall be expended solely for acquisition, development, or rehabilitation of parkland or improvements related thereto.

4.10 Home Owner's Association

4.10.1 Conditions Requiring Owner's Association

An Owner's Association shall be established to fulfill the requirements of the NC Condominium Act or to accept conveyance and maintenance of all common areas and facilities within a development containing common areas. The Owner's Association shall be in legal existence prior to conveyance, lease-option, or other long-term transfer of control of any unit or lot in the development.

4.10.2 Home Owner's Association Requirements

- a. Common ownership of the open space by an Owner's Association that assumes full responsibility for its maintenance. The restrictive covenants shall provide that, in the event the Owner's Association fails to maintain the open space according to the standards of this Ordinance, the City may, following reasonable notice:
 - i. Demand that deficiency of maintenance be corrected; or
 - ii. Enter the open space to maintain same. The cost of such maintenance shall be charged to the Owner's Association.
- b. The Owner's Association shall be responsible for maintaining the completed permanent runoff control structure as directed by the governmental office having jurisdiction for watershed protection and, if the owner's association should be dissolved or cease to exist, then in that event, all of the owners of record at the time of required maintenance shall be jointly liable for any and all costs attendant thereto.
- c. All subdivisions requiring the development of new public roads must be named. The name of the subdivision shall not duplicate nor closely approximate the name of an existing subdivision within the City or ETJ. A sign clearly indicating the name of the subdivision shall be posted at the main entrance to the subdivision.
- d. Construction of the subdivision sign shall be the responsibility of the applicant. A sign easement equal to one and one-half times the size of the sign shall be provided for the location of the sign. Ownership of the easement and sign shall be the responsibility of the Owner's Association that assumes full responsibility for its maintenance. In the event that the Owner's Association fails to maintain the sign and easement to the standards of this Ordinance, the City may, following reasonable notice:
 - i. Demand that the deficiency of maintenance be corrected; or
 - ii. Enter the easement to maintain same.
 - iii. * The cost of such maintenance shall be charged to the Owner's Association.

4.10.3 Cluster Development - Requirements for Non-Profit Ownership of Open Space

- a. Where the open space is to be deeded to Owner's Association or other such nonprofit ownership, the developer shall file a declaration of covenants and restrictions that will govern the open

space and the association of nonprofit organizations. This declaration shall be submitted with Preliminary Plat approval and shall include, but not be limited to the following:

- i. The Owner's Association or the nonprofit organization shall be established before any lots are sold.
 - ii. Membership shall be mandatory for each lot buyer and any successive buyer.
 - iii. The association shall provide for liability insurance, any taxes, and maintenance of all grounds and facilities.
 - iv. Any sums levied by the Owner's Association that remain unpaid shall become a lien upon the lot owner's property.
- b. If all or any portion of the property held by the Owner's Association is to be disposed of or if the association is dissolved, all such property shall be deeded in fee simple absolute title to the City at no cost to the City.