ARTICLE III

Requirements for Improvement and Design Standards

Section 1. General Improvements

In addition to the requirements established herein, all subdivision plans shall comply with the following laws, rules, and provisions:

- 1. All applicable statutory provisions.
- The Town of Magnolia Zoning Ordinance, building and housing codes, and all other applicable laws of the appropriate jurisdictions.
- 3. The Comprehensive Plan of the Town of Magnolia including all improvements shown on the plan as adopted.
- 4. Any requirements or rules of appropriate state agencies.
- 5. The standards and regulations adopted by any Magnolia boards, commissions or officials.
- 6. Building Permits may be withheld if a subdivision does not conform with the above guides or purposes of these regulations.
- 7. Land which the Planning Commission finds to be unsuitable for subdivision or development due to flooding, improper drainage, steep slopes, rock formations, adverse earth formations or topography, utility easements, or other features which will reasonably be harmful to the safety, health, and general welfare of the present or future inhabitants of the subdivision and/or its surrounding areas, shall not be subdivided or developed unless acceptable methods are determined by the developer and approved by the Planning Commission, upon recommendation of the Development Advisory Committee, to solve the problems created by the unsuitable land conditions. Such land shall be set aside for uses as shall not involve such a danger.
- 8. Existing features which would add value to residential development or to the town as a whole, such as trees, water ways, historic spots, and similar irreplaceable assets, shall be preserved in the design of the subdivision.

9. The applicant shall place permanent reference monuments of stone or concrete, at least 30 inches in length and four inches square with suitable center point, flush with the finished grade at such locations as may be required by the commission's staff.

Monuments of non-corrosive metal pipe, 3/4 inches in diameter and at least 24 inches in length, shall be set in place flush with the finished grade at all intersections of streets, at all intersections of streets and alleys within subdivision boundary lines; at all points on streets, alleys, and boundary lines where there is a change in direction or curvature; and all lot corners.

Section 2. Lot Improvement

- 1. The lot arrangement, design, and orientation, shall be such that all lots will provide satisfactory building sites, properly related to topography and character of surrounding development.
- 2. The dimensions and areas of all lots shall comply with the requirements of the zoning district in which they are located.
- 3. Excessive lot depth in relation to lot width shall be avoided.
- 4. Corner lots shall desirably have extra width to permit appropriate building setback from both streets in accordance with the Zoning Ordinance.
- 5. Every lot shall abut upon, and have access to, a street.
- 6. Double frontage and reverse frontage lots shall be avoided, except where their use is essential to overcoming special topographic problems or to separating residential development from heavy street traffic.
- 7. Residential lots fronting or abutting on major thoroughfares shall desirably have extra lot depth and deeper building setbacks.
- 8. Lots adjoining a railroad line shall have extra lot depth and shall provide for an appropriate means of buffering such lots from railroad lines.
- 9. Insofar as possible, side lot lines shall be substantially at right angles or radial to the street line, except where a variation to this requirement will provide an improved street and lot layout.

- 10. The size and shape of lots intended for single-family residential use shall be sufficient to permit the ultimate provision of at least a single garage on each lot, except that the commission may permit the grouping of garages into a compound serving several such lots.
- 11. Lots shall be laid out so as to provide positive drainage away from all building and individual lot drainage shall be coordinated with the general storm drainage pattern for the area. Drainage shall be designed as to avoid concentration of storm water drainage from adjacent lots on to any one lot.

Section 3. Street Improvements

- 1. The street layout shall be designed to create desirable building sites while respecting existing topography, minimizing street grades, avoiding excessive cuts and fills, and preserving trees to the maximum extent possible.
- 2. Streets shall be spaced to allow for blocks meeting the dimensional requirements contained herein and to minimize the number of intersections with existing or proposed major thoroughfares.
- 3. Where the subdivision adjoins or embraces any part of a major thoroughfare the layout of such subdivision shall provide for the platting and dedication of such part of the major thoroughfare in the location and at the width indicated, except that the subdivider shall not be required to dedicate that part of such major thoroughfare which is in excess of 80 feet in width (40 feet from the centerline on either side of the right-of-way). He may, however, be required to reserve any excess over 80 feet for future acquisition by the State Division of Highways.
- 4. Wherever deemed desirable to the layout of the subdivision and adjoining areas, the commission may require the platting and dedication of one or more collector streets, or parts thereof, to serve the subdivision.
- 5. Minor streets, intended primarily for access to individual properties, shall be so arranged as to discourage their use by through traffic.
- 6. Streets shall be laid out to intersect one another at as near right angles as topography and the limiting factors of good design will permit, and no street shall intersect another street at an angle of less than 70 degrees for a minor street or 80 degrees for a major thoroughfare.

- 7. All streets shall be constructed to meet the standards and specifications of the State of Delaware Division of Highways.
- 8. Proposed collector streets in the subdivision shall provide for the continuation of existing, planned, or platted streets on adjacent tracts, unless such continuation shall be prevented by topography or other physical condition, or unless such extension is found by the commission to be unnecessary for the coordination of development between the subdivision and such adjacent tract. When deemed advisable the commission may restrict access to proposed collector streets from abutting properties.
- 9. Where the commission deems it desirable or necessary to provide access to adjacent tracts not presently subdivided, proposed collector streets in the subdivision shall be extended to the boundary lines with such adjacent tract, and temporary turnarounds shall be provided within the subdivision at the ends of such streets, by means of temporary easements or otherwise.
- 10. Where the subdivision abuts or contains a major thoroughfare, the commission may require that measures be taken to reduce the impact of heavy traffic on the residential lots abutting or fronting upon such highway, and to afford separation of through and local traffic by one of the following measures:
 - a. By providing vehicular access to such lots by means of a service drive separated from the major thorough-fare by a planting strip at least 30 feet in width and connecting therewith at infrequent intervals.
 - b. By designing reverse frontage lots having access only from a parallel minor street or from cul-de-sac or loop streets, and with vehicular access to such lots from the major thoroughfare prohibited by deed restrictions or other means.

The choice of the most appropriate method of accomplishing the desired purpose in a specific instance shall be made by the commission, or its staff giving consideration to topography and other physical conditions, the character of existing and contemplated development in the subdivision and its surroundings, and other pertinent factors.

11. Cul-de-sac streets, generally not exceeding 600 feet in length, shall be permitted where they are necessitated by topographic conditions or where in the judgment of the commission or its staff, they are appropriate to the type of development contemplated.

- 12. Private alleys shall be provided in commercial and industrial areas, unless adequate access to parking and loading area is provided by other means. Private alleys may not be permitted in residential areas, except for the purpose of providing rear access to row dwellings or where required by topographic or other unusual conditions. In the absence of private alleys, easements will be required for utility lines or drainage facilities.
- 13. Except as hereafter provided, there shall be no private streets platted in any subdivision and every subdivided property shall be served from a publicly dedicated street.

Section 4. Street Design Standards

In order to provide for roads of suitable location, width, and improvement to accommodate prospective traffic and afford satisfactory access to police, firefighting, snow removal, sanitation and road maintenance equipment, and to coordinate roads so as to compose a convenient system and avoid undue hardships to adjoining properties, the following minimum design standards for streets and roads are hereby required.

- Right-of-way widths for other street types shall be not less than 60 feet for collector streets and for minor streets in multiple-family residential, commercial and industrial areas, 50 feet for minor streets in other residential areas; and 16 feet for alleys.
- 2. Roadway widths for roads and highways shall be not less than the minimum specified by the State Division of Highways, but in any case not less that 20 feet. Generally these roadway widths for streets shall not be less than the following:
 - a. Collector streets, minor streets in multi-family residential, commercial, and industrial areas: 34 feet paved with curbs and gutters, except that streets serving lots of one acre or more may, with the approval of the commission have a minimum roadway width of 20 feet.
 - b. Minor streets in single-family residential areas, and service drives: 24 feet paved with curbs and gutters.
 - c. Alleys: 16 feet paved.
- 3. Cul-de-sac streets shall have a circular turnaround of not less than 80 feet paved in diameter to the street line, and with a roadway of not less than 80 feet in diameter, unless the commission approves a "T" or "Y" backaround.

- 4. Street grades shall not be less than 0.5 percent or greater than 7.0 percent.
- 5. Each property corner at street intersections shall be rounded off by an arc, the radius of which shall be not less than 20 feet. Curbs at street intersections shall be rounded off concentrically with the property lines. The design of the intersection should provide clear sight distance for oncoming vehicles, and there should be a suitable leveling of the street grade within and approaching the intersection. (See appendix for illustration)

Section 5. Drainage and Storm Sewers

- 1. The Planning Commission shall not recommend for approval any plan of a subdivision which does not make adequate provision for storm or flood water runoff channels, or basins. The storm water drainage system shall be separate and independent of any sanitary sewer system. The system shall be designed to meet the guidelines established in the Kent County Drainage Code.
- 2. Construction of drainage facilities shall be in accord with the standards and specifications established by the Delaware State Division of Highways.
- 3. Where a proposed subdivision is traversed by any stream, water course, or drainageway, the subdivider shall make adequate provision for the proper drainage of surface water, including the provision of easements along such streams, water courses, and drainageways, in accordance with standards established by the commission.

Section 6. Water Facilities

Each lot in a subdivision must be connected to the town's water supply and distribution system. The applicant shall provide these improvements as well as appropriately spaced fire hydrants. Hydrants shall be the B-50 type with national standard threads. Plans for connection shall meet the requirements of all appropriate state agencies and town officials, but in no case shall water mains be less than eight inches in diameter.

Section 7. Sanitary Sewer Facilities

Sanitary sewer facilities shall connect with public sanitary sewerage systems, and shall meet as a minimum, the design criteria established in the Kent County Sanitary Code. Sewers shall be installed to serve each lot and to grades and sizes required by approving officials and agencies. No individual disposal system or treatment plants (private

or group disposal systems) shall be permitted. Sanitary sewerage facilities (including the installation of laterals in the right-of-way) shall be subject to the specifications, rules, regulations, and quidelines of appropriate state agencies and town officials.

Section 8. Erosion and Sedimentation Control

- 1. All subdivision plans shall include adequate provision for control of temporary flooding or erosion and sediment control, both during construction and after completion of construction.
- 2. No top soil shall be removed from the site or used as spoil. Top soil moved during the course of construction shall be redistributed so as to provide at least six (6) inches of cover to all areas of the subdivision and shall be stabilized by seeding and planting.

Section 9. Underground Utilities

All utility facilities, including but not limited to gas, electric power, telephone, and CATV cables, shall be located underground throughout the subdivision. Wherever existing utility facilities are located aboveground, except where existing on public roads and rights-of-way, they shall be removed and placed underground. All utility facilities existing and proposed throughout the subdivision shall be shown on the preliminary plan. Underground service connections to the street property line of each platted lot shall be installed at the subdivider's expense. At the discretion of the Planning Commission, the requirement for service connections to each lot may be waived in the case of adjoining lots to be retained in single ownership and intended to be developed for the same primary use.

Section 10. Sidewalks

Sidewalks shall be required in all subdivisions and shall be included within the dedicated nonpavement right-of-way of all streets and roads.

1. In residential subdivisions sidewalks shall be five feet in width unless otherwise specified, and in commercial and industrial subdivisions they shall be from curb to property lines unless otherwise specified.

Section 11. Street Lights

Street lights shall be required in all subdivisions unless specifically exempted by the commission. The installation of street lights including number, type, and spacing, shall be as specified by the commission or its staff.

Section 12. Inspection and Completion

All construction work on improvements required herein shall be subject to inspection and approval by the appropriate authorized public officials. Upon the completion of each improvement, the subdivider shall furnish the Town Foreman with accurate and detailed description of location and completion date of the improvement as it was actually constructed. No underground installation shall be covered until inspected and approved.

Section 13. Maintenance Bond

When all improvements are completed to the satisfaction of the Town Foreman and when the subdivider makes application for dedication of streets, other public areas and easements, such application shall be accompanied by a maintenance bond in the amount determined by the Planning Commission upon the advice of the Town Foreman to be adequate to assure the satisfactory condition of the initial improvements for a period of one year following their completion. Such bond shall be satisfactory to the Town Attorney as to form, sufficiency, manner of execution and surety.