

The Town of
Leesburg,
Virginia

PRESENTED: August 12, 2008

ORDINANCE NO. 2008-O-22

ADOPTED: August 12, 2008

AN ORDINANCE: AMENDING THE DESIGN AND CONSTRUCTION STANDARDS MANUAL FOR ARTICLE 1 GENERAL INFORMATION; ARTICLE 7 TRANSPORTATION; ARTICLE 8 VEGETATION PRESERVATION AND PLANTING; ARTICLE 10 CONSTRUCTION DRAWING FOR SUBDIVISIONS AND DEVELOPMENT PLANS - INFORMATION AND PREPARATION; AND ARTICLE 11 MANUAL STRUCTURE, REVISIONS, DEFINITIONS, REFERENCES, INDEX AND BIBLIOGRAPHY;

The Town Council of Leesburg, Virginia, ordains:

SECTION I. That the following sections of the Design and Construction Standards Manual of the Town of Leesburg, Virginia, 1990, as amended, are and the same is hereby amended to read as follows:

1. Article 1 - General Usage

1. This Manual shall be read, interpreted, and applied in conjunction with the Zoning Ordinance and the Subdivision and Land Development and Subdivision Regulations.
2. As used in this Manual, unless obvious construction of the wording indicates otherwise, words used in the present tense include the future tense; words in the singular number include the plural number; and words in the plural number include the singular number.
3. Words in the masculine gender include the feminine.
4. "Shall" is mandatory.
5. "May" is permissive at the discretion of the Director.
6. "Development" when used alone shall mean subdivision or development plans.
7. "Director" shall mean the Director of ~~Engineering and Public Works~~ Plan Review or his designee for all articles of this manual with the exception of Articles 2 and 4 where "Director" shall mean the Director of Utilities or his designee. In addition, any reference in this manual to the "Director of Engineering and Public Works" or the "Director of "Engineering" shall be interpreted to mean the "Director of Plan Review" or his designee.

2. Section 1-410 Enforcement

The Town Manager shall administer the regulations contained in the Design and Construction Standards Manual.

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Appeal of decisions rendered by the Director of ~~Engineering and Public Works~~ during review and approval of construction drawings (such review being designated in Section 1-420) is within the administrative enforcement authority of the Town Manager.

The Town Manager, when evaluating any appeal, shall act to preserve the health, safety, property, and welfare of the town and its citizens; and, shall act or direct actions in conformance with regulations promulgated by the Commonwealth of Virginia, Board of Architects, Professional Engineers, Land Surveyors and Landscape Architects.

3. Section 1-430 Procedure

1. A subdivider or Developer may submit construction drawings which do not strictly adhere to the technical standards, technical specifications, or numerical values set forth in the Design and Construction Standards Manual where:
 - A. The plan set meets all of the criteria listed in Section 1-420 above.
 - B. The designer shall provide the following information on the plan set cover sheet for all elements which are not in strict adherence:
 - (1) Identifying number.
 - (2) Design and Construction Standards Manual section citation.
 - (3) Plan sheet on which the "modification" or the "interpretation" is located.
 - C. Each plan sheet shall have each element which is not in strict adherence labeled with the identifying number.
 - D. The Director shall take action on such "modifications" or "interpretations" concurrently with the required action on the construction drawings.
2. A subdivider or Developer may alternatively request a "modification" or "interpretation" for construction drawings prior to plan submission.
 - * A. All such requests for "modifications" or "interpretations" shall be in the standard format of this section.
 - B. The Director shall take action on all "modifications" or "interpretations" within 30 days of receipt.

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- C. All requests for "modifications" or "interpretations" shall be addressed to the Director of ~~Engineering and Public Works~~ as defined in Article ii "Empowering Ordinances"

4. Section 7-220 Street Classifications

- 1. Streets within the Town of Leesburg shall be functionally classified by projected traffic at project build out plus 20 years. This method of classification shall be utilized up to and including through collector. Arterials are to be as shown in the Town Plan.

Projected Vehicles per day	Functional Classification
A. Cul-de-sacs, loops, and other streets of fixed vehicular generation	
Up to 250 VPD	Local Street
251- 500 VPD	Local Street
B. Tertiary subdivision streets	
Up to 250 VPD	Local Street
C. Major subdivision roads and streets	
251- 1000 VPD	Local Street
1000- 2000 VPD	Local Collector
2000+ VPD	Through Collector
As shown on Town Plan	Minor Arterial
As shown on Town Plan (Major Arterial)	Principal Arterial
D. Determination of the functional classification by projected vehicle counts is presented as a guide for subdivisions and planned developments and may be modified by the Director of Engineering and Public Works to account for site particulars.	

5. Section 7-300 Street Design Requirements

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D. Footnotes:

- (1) Determination of functional classification by projected vehicle counts is presented as a guide for residential subdivisions and planned developments and may be modified by the Director of ~~Engineering and Public Works~~ to account for individual site differences.
- (2) On principal arterial, minor arterial, or through collector streets with a traffic count of more than 2,000 VPD there shall be no direct access from one and two-family residential driveways.
- (3) Grades of relatively short lengths (up to 300 feet) may be increased to ten percent absolute maximum. Approval by the Director of Engineering and Public Works is required and design rationale must show that such steep grades will not cause an intolerable maintenance situation.
- (4) Dimensions shown take into consideration that parking will be permitted.

6. Section 8-700 Planting Practice within Easements

3. Special Approval.

Special approval from the Director of ~~Engineering and Public Works~~ to locate ordinance-required trees in a public easement may be authorized if the following are met:

- A. All options in item 2 above have been fully investigated and do not resolve the location of proposed trees.
- B. Tree species selected for placement within a public easement must be a type which obviates the effect of the root system upon the pipeline.
- C. Trees shall not be placed directly over top of an underground pipeline. Trees must be placed as far as possible from the underground pipeline (recommend minimum clearance of five feet).
- D. Trees placed in public easements by special approval will not be replaced by the Town if damaged by the utility line or maintenance activities.

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7. Section 10-110 Required Contents of Construction Drawings for Subdivisions

- E. In addition to the specific requirements cited below, construction drawings shall also include other calculations, drawings, details and notes that may be deemed necessary by the Director of ~~Engineering~~ to ensure the design, operation and maintenance of public systems.

- 2. **Specific Information Required.** The construction drawings shall include the following details and information appropriate to the project. Refer to Articles 1 through 9 for more detailed requirements. Additional engineering information, calculations, drawings, details, and notes not in conflict with the town's required specifications may be deemed necessary by the Director of ~~Engineering~~ in unusual circumstances to ensure the safe and efficient operation and maintenance of the public facilities within the subdivision and may be required as a condition for approval.

Supporting calculations, reports, and analyses may be submitted in a "design book" format or may be affixed to the plan set.

- A. **Water System.** Construction Drawings for public water systems shall include:
 - (1) Water system calculations, prepared by the developer's engineer, which demonstrate adequate domestic supply pressure and fire flow. Water system calculations shall be based upon the hydraulic conditions as predicted by the Town's water system computer model. Computer modeling for hydraulic conditions at the points of connection is performed by the town Utilities Department on a fee basis. Coordinate existing water system

- J. **Other Information.**
 - (1) Public street security lighting plan coordinated with the Director and in accordance with the street security lighting policy of this manual.

 - (2) A lighting plan indicating that all outdoor lighting fixtures (if any) proposed with the subdivision construction drawings, exclusive of public street lights and walkway, accent lights or yard lighting located on individual

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residential lots, will not have a source of illumination that is visible beyond the site or cause illumination of adjacent properties in excess of 0.5 foot-candles as measured at the site boundary.

- (3) Location of proposed electrical, telephone, cable television, and gas lines and associated easements.
- (4) Boundary survey of the property with bearings and distances.
- (5) Off-site right-of-way dedications, temporary construction easements, off-site easement documents, maintenance agreements, and letters of permission (letters of permission only acceptable for private, non-bonded improvements on lands of others).
- (6) Off-site right-of-way dedication, temporary construction easements, off-site easement documents, maintenance agreements and letters of permission (letters of permission only acceptable for private, non-bonded improvements on lands of others).
- (6) Other information required by the Director of ~~Engineering~~ as necessary to review and approve the construction drawings, not in conflict with the Town's required specifications.

8. Section 10-120 Required Contents of Construction Drawings for Final Development Plans

- E. In addition to the specific requirements cited below, construction drawings shall also include other calculations, drawings, details and notes that may be deemed necessary by the Director of ~~Engineering~~ to ensure the design, operation and maintenance of public systems.
2. Specific Information Required. The construction drawings shall include the following details and information appropriate to the project. Refer to Articles 1 through 9 for more detailed requirements. Additional engineering information, calculations, drawings, details, and notes not in conflict with the Town's required specifications may be deemed necessary by the Director of ~~Engineering~~ in unusual circumstances to ensure the safe and efficient operation and maintenance of the public facilities within the development and may be required as a condition for approval.

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Supporting calculations, reports, and analyses may be submitted in a "design book" format or may be affixed to the plan set.

A. Water System. Construction Drawings for public water systems shall include:

- (1) Water system calculations, prepared by the developer's engineer, which demonstrate adequate domestic supply pressure and fire flow. Water system calculations shall be based upon the hydraulic conditions as predicted by the Town's water system computer model. Computer modeling for hydraulic conditions at the points of connection is performed by the Town Utilities Department on a fee basis. Coordinate existing water system modeling with the Director of Utilities.

J. Other Information.

- (1) Public street security lighting plan coordinated with the Director and in accordance with the street security lighting policy of this manual.
- (2) An onsite lighting plan indicating that all outdoor lighting fixtures exclusive of public street lights will not have a source of illumination that is visible beyond the site or cause illumination of adjacent properties in excess of 0.5 foot-candles as measured at the site boundary. Levels of illumination at entrances may be higher but in no case shall cause glare on public roadways.
- (3) Location of proposed electrical, telephone, cable television, and gas lines and associated easements.
- (4) Boundary survey of the property with bearings and distances.
- (5) Off-site right-of-way dedication, temporary construction easements, off-site easement documents, maintenance agreements and letters of permission (letters of permission only acceptable for private, non-bonded improvements on lands of others).
- (6) Other information required by the Director of Engineering, as necessary to review and approve the construction drawings, not in conflict with the Town's required specifications.

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- (7) All survey lot corners and construction benchmarks, together with their description, shall be provided.

7. Section 10-130 Requirements for Rough Grading Plans

10-135 Requirements for Grading and Drainage Plans on Lots of Record

1. Prior to issuance of a zoning permit for construction on an existing lot of record, which is not included in an approved set of construction drawings and currently bonded with the Town, the Developer shall provide a grading, drainage, and utilities connection plan prepared by design professional licensed to practice in the Commonwealth of Virginia. Such a plan shall contain the following information and shall demonstrate no adverse physical impact on existing public improvements or adjacent private property.
2. Specific Information and Details Required. The grading, drainage, and utilities connection plan shall include the following details and information appropriate to the project. Other engineering information, calculations, drawings, details, and notes not in conflict with the Town's required specifications may be deemed necessary by the Director of Engineering as a condition for approval.
 - A. Water System.
 - (1) Water system calculations which demonstrate adequate domestic supply pressure and fire flow.
 - (2) Location and sizes of existing and proposed water mains, lines, meters, valves, connections and easements.
 - (3) Location of existing and proposed fire hydrants and other fittings, blow-offs and air release valves.
 - (4) Coverage plan for fire hydrants, indicating coverage of all areas with 300-foot hose reach to the most remote edge of any proposed structure.
 - B. Sanitary Sewer System.
 - (1) Calculations supporting the basis of the sanitary sewer system design. (Not required for single family development.)

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- (3) Recorded boundary line information of the property with bearings and distances.
- (4) Letters of permission, temporary construction easements, off-site easement documents and maintenance agreements.
- (5) Other information required by the Director of ~~Engineering~~ as necessary to review and approve the construction drawings, not in conflict with the Town's required specifications.

8. Section 10-140 Construction

1. Cutsheets.
 - A. Cutsheets prepared by a surveyor or engineer, duly authorized by the State of Virginia to prepare same, shall be submitted in triplicate to the Director of Public Works for approval, not less than 24 hours prior to actual construction.
 - B. Cutsheets shall be prepared on forms approved by the Director. *Refer to Cutsheet Detail of this Article.*
 - C. Cutsheets shall provide sufficient information including, but not limited to, stations, depth, and widths to accurately excavate utility trenches.
 - D. Special requirements for utility trench excavations such as shoring and dewatering pumps based on Geotechnical information, shall be clearly stated.
 - E. Approval of construction sheets (cut sheets) by the Director of Public Works shall be construed as certification to construct under the Town of Leesburg's Plan Review Program.

9. Section 10-620 Bonding of Improvements

1. Procedure for establishing a Bond Agreement with the Town of Leesburg. The following forms shall be executed:
 - A. Performance Agreement:
 - B. Estimate of improvements.

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- C. Bond guarantee, as described in Section 13-94, Subdivision and Land Development Regulations.
 - D. Water Extension Permit, if applicable.
 - E. Sewer Extension Permit, if applicable.
2. The Bond Agreement forms must be filed with the ~~Land Development Official~~ Director of Public Works at least ten days prior to the Council meeting at which first consideration is desired. The Director of ~~Engineering~~ Public Works shall provide the Town Council with an estimated cost of the bonded improvements. The Town Attorney shall review the Bond Agreement documents and provide the Town Council with a recommendation.
3. Improvements in a proposed subdivision or development may be bonded in sections provided that these sections are indicated on the approved subdivision or development plans and the Director of ~~Engineering~~ has found that provisions have been made to insure that these improvements can be enjoyed without undue risk to public safety. Improvements such as temporary cul-de-sacs and traffic barricades, will be included in the estimate of improvements. Where possible, sections shall begin and terminate at street intersections or other logical points.
4. The following bond guarantees are acceptable, provided they are consistent with the regulations below:
- A. A cash deposit may be posted to guarantee any performance agreement. The funds on deposit shall bear a currently accepted interest rate. Interest shall be available to the Town in the case of default or breach of the Performance Agreement. If the improvements are successfully completed, this interest shall be refunded to the developer.
 - B. Irrevocable letters of credit from financial institutions are acceptable, provided they are approved by the Town Attorney and the following conditions are met:
 - (1) All letters of credit shall conform to the Letter of Credit form provided by the Town or be approved by the Town Attorney.
 - (2) Letters of credit shall extend at least three months beyond the expiration date of the performance agreement.

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- (3) The financial institution must notify the ~~Land Development Official~~ Director of Public Works in writing at least one month in advance of any cancellation including normal expiration of term. Failure to do so will automatically extend the letter of credit for an additional three months.
 - (4) The financial institution issuing the letter of credit shall be insured by the Federal Depository Insurance Corporation or the Federal Savings and Loan Insurance Corporation, and be chartered in the State of Virginia or shall have a designated agent in Virginia.
8. The Council shall accept public improvements installed by a subdivider or developer which meet the following conditions:
- A. The completed improvements comply with the design standards of this Manual and the Subdivision and Land Development Regulations.
 - B. All final inspections required by this Article have been completed by the Town and the bonded improvements found to be acceptable by the Director of ~~Engineering~~ Public Works.
 - C. The subdivider or Developer shall have prepared and submitted one reproducible set and two sets of prints of plans that accurately depict the bonded improvements as actually built.
 - D. The subdivider or Developer, by appropriate instrument in a form approved by the Town Attorney, has conveyed to the Town good title, free of all liens, for all public improvements for which the Town is to be responsible for operation and maintenance.

10. Section 11-160 Interpretations.

For the purpose of the Town of Leesburg Design and Construction Standards Manual, certain words and terms are to be interpreted as follows:

1. Words used in the present tense may include the future; words used in the masculine gender shall include the feminine and neuter; words in the singular number may include the plural; and words in the plural can include the singular, unless the obvious construction of the wording indicates otherwise.

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2. The words "shall", "must" and "will" are mandatory.
3. The word "may" is discretionary, at the discretion of the Director.
4. The word "should" shall be used as a guide to design.
5. Unless otherwise specified, the term "day" shall mean calendar day.
6. The word "State" means the Commonwealth of Virginia. The word "County" means the County of Loudoun, Commonwealth of Virginia; the word "Town" means the Town of Leesburg; and the term "Town Limits" means any exterior boundary of the Town of Leesburg.
7. The term "**Director**" shall mean the duly appointed Director of ~~Engineering and Public Works for the Town of Leesburg, Virginia~~ Plan Review or his designee for all articles of this manual with the exception of Articles 2 and 4 where "Director" shall mean the Director of Utilities or his designee. In addition, any reference in this manual to the "Director of Engineering and Public Works" or the "Director of Engineering" shall be interpreted to mean the "Director of Plan Review" or his designee.
8. The term "The Code" means the Code of the Town of Leesburg, Virginia.

11. Section 11-200 Revisions

1. By April 15 of each calendar year which is divisible by "5", the Town Manager shall convene the Revision Committee for the purpose of evaluating the performance of this manual in achieving the town goals. The term of the Revision Committee shall be 2 years.
2. The Revision Committee shall consist of the following:
 - A. Director of ~~Engineering~~ Plan Review
 - ~~B. Chief of Plan Review~~
 - B.C. Land Development Official
 - C.D. Director of Utilities, and
 - D.E. Three representatives from the Northern Virginia Building Industry Association (NVBIA) which should include:

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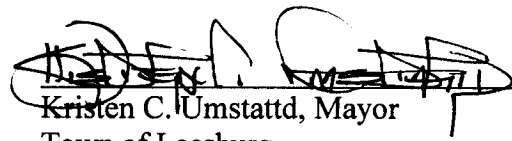
- (1) One Owner/Developer
 - (2) One design professional (engineer, architect, land surveyor, landscape architect, or planner)
 - (3) One NVBIA option
3. The Revision Committee will review all requests for interpretations, revisions, rulings, or appeals, which have been requested since the last revision of this manual. The Revision Committee will also review any other provisions of this manual as may arise during the committee's discussions. The time goal for review by the Revision Committee shall be 1 year from the date of the manager's initiation of the committee.

SECTION II.. All prior ordinances in conflict herewith are hereby repealed.

SECTION III. Severability. If a court of competent jurisdiction declares any provision of this ordinance invalid, the decision shall not affect the validity of the ordinance as a whole or any remaining provisions of the zoning ordinance.

SECTION IV. This ordinance shall be in effect upon its passage and shall apply after the effective date..

PASSED this 12th day of August 2008.


Kristen C. Umstatt, Mayor
Town of Leesburg

ATTEST:



Clerk of Council