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**ARTICLE I**  
**General Provisions**

**§ 241-1. Purpose and intent.**

- A. The Subdivision Control Law has been enacted by the Town of Lee for the purpose of protecting the safety, convenience and welfare of the inhabitants of the town by regulating the laying out and construction of ways in subdivisions providing access to the several lots therein but which have not become public ways, and ensuring sanitary conditions in subdivisions and, in proper cases, parks and open areas.
- B. The powers of a Planning Board under the Subdivision Control Law (MGL. Ch. 41 §§ 81K to 81GG) shall be exercised with due regard for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel; for lessening congestion in such ways and in the adjacent public ways; for reducing danger to life and limb in the operation of motor vehicles; for securing safety in the case of fire, flood, panic and other emergencies; for ensuring compliance with the Lee Zoning Bylaw; for securing adequate provisions for water supply, sewerage, drainage, underground utility services, fire, police, and other similar municipal equipment, and street lighting and other requirements where necessary in a subdivision; and for coordination of the ways in a subdivision with each other and with the public ways in the Town of Lee and with the ways in neighboring subdivisions.
- C. It is the intent of the Subdivision Control Law that any subdivision plan filed with the Planning Board shall receive the approval of the board if said plan conforms to the recommendation of the Board of Health and to these subdivision regulations; provided, however, that the Board may, when appropriate, waive (as provided in section 81R of the Subdivision Control Law) such portions of the rules and regulations as the Board deems advisable.
- D. The Planning Board has developed these regulations for design and construction of subdivisions to accomplish the following objectives:
  - (1) Assure safe and adequate access to buildable portions of lots along existing roads and new subdivision roads.
  - (2) Provide for access by emergency vehicles.
  - (3) Minimize traffic congestion.
  - (4) Provide safe and attractive areas for pedestrians and bikers.
  - (5) Allow for flexibility, innovation and creativity in the design of roads and developments.
  - (6) Encourage designs of roads and lot layouts that create compact, attractive, livable neighborhoods consistent with the established character of Lee and with the guidelines and principles included in the Lee Master Plan.
  - (7) Encourage development plans that conform to natural topography and natural features, that minimize tree clearing, and that preserve scenic and historic qualities
  - (8) Provide design and construction standards for a variety of roads that are safe and appropriate for the neighborhoods and for the number and type of dwelling units proposed.
  - (9) Assure proper storm drainage, stormwater management and controls of erosion and sedimentation, drinking water, sewage disposal, and fire protection.
  - (10) Provide for developments that will not overtax existing or planned expansion of municipal services.
- E. Suitability of the land. No definitive plan of a subdivision of land shall be approved by the Planning Board unless the Board of Health has carefully examined the general site and has granted its approval. The Board of Health shall determine whether the land involved can be used in whole or in part for the subdivision, considering especially the suitability of the soil conditions for proper surface and subsurface drainage, water supply and, where applicable, for on-site septic systems. The applicant's civil engineer shall address these issues. The Planning Board is concerned about underground springs and heavily compacted soils.

**§ 241-2. Statutory authority; effective date; plan required.**

- A. Statutory Authority. Under the authority vested in the Planning Board of the Town of Lee by MGL Ch. 41, § 81Q, said Board hereby adopts these rules and regulations governing the subdivision of land in the Town

of Lee. Such rules and regulations originally became effective on and after the 25<sup>th</sup> day of June 1956. This version of the subdivision regulations supersedes all previous versions and is effective by vote of the Lee Planning Board on February 2, 2004.

- B. Basic requirements. No person shall make a subdivision, within the meaning of the Subdivision Control Law, of any land within the Town of Lee or proceed with the plotting, improvement or sale of lots in a subdivision or the construction of ways or the installation of town services therein unless and until a plan has been submitted, approved and endorsed by the Planning Board as hereinafter provided.

**§ 241-3. Minimum requirements; effect on existing laws.**

- A. The provisions of these regulations shall be the minimum requirements adopted for the promotion of health, safety and welfare of the people of the Town of Lee. These regulations are not intended to repeal, abrogate, annul or in any manner interfere with any existing laws, covenants or rules. It is provided, however, that where these regulations impose a greater restriction than is required by such existing laws, covenants or rules, the provisions of these regulations shall govern.

**§ 241-4. Definitions.**

As used in these regulations, the following terms shall have the meanings indicated:

ABUTTERS – Owners of land directly opposite the property included in the plan on any public or private street or way, and owners of land directly abutting upon the property, and abutters to the direct abutters within 300 feet from the property, all as appearing on the most recent tax list of the Town of Lee.

BOARD – The Planning Board of the Town of Lee.

DEAD END STREET – A street, extension of a street or system of streets connected to other streets only at a single point; i.e. having only one point for access and egress by vehicles.

DEFINITIVE PLAN – The final map, drawings and all required supporting data upon which the subdivider's plan of a subdivision is presented to the Board for approval and which, if approved, will be submitted to the Registry of Deeds or Land Court for filing.

DWELLING UNIT – One room, or rooms connected together, with complete, independent housekeeping facilities, including permanently installed kitchen facilities, arranged or designed for use by only one family, which is physically separated from other rooms or dwelling units which may be in the same building.

LOT – A clearly defined piece of land in one ownership, leasehold or control, of sufficient area and dimensions to meet minimum zoning requirements for width, area, use and coverage and to provide such yards and other open spaces as are required for a Building Lot under the Lee Zoning Bylaw and having adequate frontage and access on a public street or on a way qualifying under the Subdivision Control Law.

MAJOR RESIDENTIAL SUBDIVISION – A Subdivision that is not a Minor Residential Subdivision. The division of land into seven or more building lots or lots having a total of seven or more dwelling units with frontage on a proposed subdivision road.

MINOR RESIDENTIAL SUBDIVISION – The division of a parcel of land existing as of the effective date of these regulations into no more than six building lots or lots having a total of no more than six dwelling units, and having frontage on a proposed private subdivision road owned and maintained by a homeowner's association. A Minor Residential Subdivision road can never be accepted as a town way.

NON-RESIDENTIAL SUBDIVISION – A Subdivision of land with the subdivision road and/or non-residential building lots located partially or entirely in a Non-Residential Zoning District.

**PRELIMINARY PLAN** - A plan or plans of a proposed subdivision and all the required supporting data indicating the proposed manner of layout of the subdivision, to be submitted to the Board for its consideration. (See MGL Ch. 41, § 81 L.)

**RIGHT-OF-WAY** – A strip of land occupied or intended to be occupied by a street, road, alley, crosswalk, easement, utility, or other special use.

**RESIDENTIAL SUBDIVISION** – A Subdivision of land located entirely within a Residential Zoning District.

**ROAD** – See Street

**STREET HIERARCHY** – means the characteristics of streets based upon increasing levels of function and volume of traffic. Refer to Table 3.1 for classification of streets.

**STREET** – A public or private way for vehicular and pedestrian traffic and utilities, included within a Right of Way.

**SUBDIVISION** – The division of a tract of land into two or more lots in such manner as to require provision for one or more new ways not in existence on June 25, 1956 when the Subdivision Control Law became effective in the Town of Lee, to furnish access for vehicular traffic to one or more of such lots, and shall include re-subdivision and, when appropriate to the context, shall relate to the process of subdivision or the land or territory subdivided. Provided however, that the division of a tract of land into two or more lots shall not be deemed to constitute a Subdivision within the meaning of the Subdivision Control Law if, at the time when it is made, every lot within the tract so divided has frontage on a public way or a way which the Clerk of the Town of Lee certifies is maintained and used as a public way, or a way shown on a plan theretofore approved and endorsed in accordance with the Subdivision Control Law, or a way in existence on June 25, 1956, having, in the opinion of the Planning Board, sufficient width, suitable grades and adequate construction to provide for the needs of vehicular traffic in relation to the proposed use of the land abutting thereon or served thereby, and for the installation of municipal services to serve such land and the buildings erected or to be erected thereon. Such frontage shall be of at least such distance as is then required by the Lee Zoning Bylaw for erection of a building on such lot. Conveyance or other instrument adding to, taking away from, or changing the size and shape of lots in such manner as not to leave any building lot so affected without the frontage above set forth, or the division of a tract of land on which two or more buildings were standing on June 25, 1956, into separate lots, on each of which one of such buildings remains standing, shall not constitute a Subdivision. (See MGL c. 41, § 81 L.)

**TRAVELED WAY** – The portion of a street having the wearing or exposed surface of the roadway provided for use by vehicular traffic.

**ARTICLE II**  
**Submission and Approval of Plans**

**§ 241-5. General Requirements**

**A. Submission of Applications**

- (1) All applications for consideration by the Planning Board shall be submitted to the Board either by delivery at a regularly scheduled meeting of the Board, or sent by registered mail to the Planning Board, care of the town clerk. If so mailed, the date of mailing shall be the date of submission of the plan.
- (2) The application shall include the requisite number of copies of the plans and application materials required by these regulations, and shall be accompanied by an application fee according to the schedule promulgated from time to time by the Board. The applicant may also submit additional information to explain the proposed project and compliance with the Subdivision Control Law and these regulations.
- (3) Applicant shall also give written notice to the town clerk by delivery or by registered mail that the plan has been submitted to the Planning Board. The notice shall be in the form of a properly completed and executed application form signed by the applicant and the owner of the land, and describing the land to which the plan relates in sufficient detail to identify the land, and giving the date when the plan was submitted.

**B. Completeness Review.**

- (1) At the Board meeting at which the plan is presented for consideration, the Board will review the submission for completeness using a checklist, and will notify the applicant whether or not the plan is complete.
- (2) Incomplete Submission. An application that lacks required information may be rejected by the Board on the basis of being an incomplete submission, or the Board may allow the applicant to supplement the original application with the required information or withdraw the application and resubmit a complete application. An incomplete application will not be acted on until the required information is submitted. The applicant must agree in writing to extend the statutory time frames for action on the application by the time between the date of the Board's determination of incomplete application and the date when the Board receives the required information and determines the application is complete. The Board shall file written notices of incomplete application, extension of time, or other decisions with the Town Clerk.

**C. Adequacy of Access.**

- (1) General. A Plan shall be approved or endorsed only if each building lot to be created by such plan has adequate actual access from the lot's frontage to a buildable portion of the lot.
- (2) Division of lots along existing ways. An existing way which existed prior to June 25, 1956 may provide access to lots shown on a plan for which Approval is Not Required under the Subdivision Control Law if the Board determines it will provide adequate access, as specified below.
- (3) Proposed subdivision road extending from an existing way. Existing ways may be considered to provide adequate access leading to a proposed subdivision road if the Board determines the design and construction features of the existing way are adequate for access by the proposed new traffic to the subdivision, as specified below.
- (4) Adequacy of existing ways. The Board shall determine that an existing way is adequate to provide access only if the existing way has an all-weather surface with a traveled way width of at least eighteen feet at all points, at least 100 feet stopping sight distance, grades less than fifteen percent (15%) at all points, a storm drainage system adequate to assure uninterrupted access, and other

design and construction features which, in the opinion of the Board, will provide safe access for the proposed use, considering traffic volume and type, and access by fire-fighting equipment and other emergency vehicles.

- (5) Inadequate ways. If the Board determines that the existing way is not adequate as noted above, it shall notify the applicant in writing that the proposed application constitutes a subdivision and requires a definitive plan approval in order to make the required improvements to the existing way. The Board shall also notify the Town Clerk of its determination.

D. Employment of Outside Consultants.

- (1) General. The Board may determine that the size or complexity of a proposed subdivision or its impacts warrant the services of outside consultants (including but not limited to engineers, planners, lawyers, hydrogeologists, or others) for plan review, impact analysis, inspections, or other technical assistance in relation to the proposal. Such professionals shall be selected and retained by the Board as provided in MGL c. 44 § 53g, with the reasonable costs for their services to be paid by the applicant.
- (2) Selection and administrative appeal. The applicant shall be notified in writing with name of the selected consultant(s) at least seven calendar days prior to initiation of the consultant's efforts, unless this notice period is waived in writing by the applicant. The applicant may administratively appeal the selection of the consultant(s) to the Board of Selectmen. The grounds for such an appeal shall be limited to claims that the proposed consultant has a conflict of interest or does not possess the minimum required qualifications. Such an appeal may be initiated by the applicant filing notice with the Town Clerk within five working days after the Board's date of notice of its selection. Consultant shall not begin its services until any appeal has been decided or 30 calendar days have elapsed without the Selectmen's decision, in which case the Planning Board's selection shall stand. Required time limits for action by the Board upon an application shall be automatically extended by the duration of the administrative appeal.
- (3) Funding. The applicant shall file with the Board an amount of money equal to the estimated cost for the services of the consultant(s), as determined by the Board. The Board expects that the cost will generally be proportional to the size and complexity of the project, and the number of reviews and meetings required. The funds shall be deposited by the town treasurer into a special interest bearing account as provided by MGL c. 44 § 53g. The funds in the special account, including accrued interest, shall be expended at the direction of the Board without further appropriation. If the unexpended balance falls below 30% of the initial estimate, or the estimate is raised to pay for additional services deemed necessary by the Board, the account shall be restored to its original level or such lower level as determined to be reasonable and necessary by the Board. Upon completion of the project and final payment of the outside consultant(s), any unexpended balance, included including accrued interest, shall be repaid to the applicant or the successor in interest.
- (4) Reporting. The town accountant shall submit annually a report of all such special accounts to the Planning Board and Board of Selectmen for their review. The annual report shall be published in the town report and a copy submitted to the state Director of the Bureau of Accounts. A final report of the special account for a project shall be submitted to the applicant or his successor in interest.
- (5) Remedy. Failure of an applicant to pay fees required hereunder (or any other fees required in other parts of this chapter) shall be grounds for the Board to continue hearings, disapprove the application, refuse to release performance guarantees, revoke prior approvals, or take other action.

**§ 241-6. Plans not requiring approval.**

- A. Any person who wishes to cause to be recorded in the Registry of Deeds or to be filed with the Land Court a plan of land and who believes that the plan does not require approval under the Subdivision Control Law may submit five copies of the application materials to the Board, including the plan, a properly executed

Form A, the filing fee, and information to demonstrate to the satisfaction of the Board that each lot has adequate access and that the plan does not constitute a Subdivision and therefore does not require approval under the Subdivision Control Law. Applicant shall also file a copy of the Form A with the Town Clerk.

- B. The plan shall include a locus plan drawn at a scale no smaller than 1" = 1000' showing the location of the property and the vicinity. The zoning district(s) applicable to the property shall be indicated.
- C. The plan shall include the following note: "Planning Board endorsement does not imply that the lots or parcels shown hereon are building lots, nor that they comply with zoning bylaws, wetlands regulations, Title 5, or other local, state or federal regulations."
- D. If the Board determines that the plan does not require approval, it shall, without a public hearing and within 21 days of submission, endorse on the plan the words "Planning Board Approval Not Required under Subdivision Control Law" and date. Said plan shall be returned to the applicant, and the Board shall notify the Town Clerk of its action.
- E. If the Board determines that the plan does constitute a Subdivision and therefore requires approval under the Subdivision Control Law, it shall, within 21 days of submission of said plan, so inform the applicant and return the plan. The Board shall also notify the Town Clerk of its determination.
- F. Failure of Board to act. If the Board fails to act upon a plan submitted under this section or fails to notify the Town Clerk and the person submitting the plan of its action with 21 days after the date of its submission, (unless the 21 day period has been extended in writing by the Applicant), it shall be deemed that the Board has determined that Approval is Not Required under the Subdivision Control Law, and it shall forthwith make such endorsement of said plan, and on its failure to do so forthwith, the Town Clerk shall issue a certificate to the same effect.

**§ 241-7. Approval of a Subdivision.**

- A. Submission and approval of Definitive Plan required. No person shall make a Subdivision of any land within the Town of Lee, or proceed with the improvement or sale of lots in a Subdivision, or the construction of ways, or the installation of municipal services therein, unless and until a Definitive Plan of such Subdivision has been submitted to and duly approved by the Board as hereinafter provided.
- B. Types of Subdivisions. There are three types of subdivision, each with its own design and construction criteria and approval procedures:
  - (1) Minor Private Residential Subdivision is an optional election by the applicant that entails simplified design and approval procedures for certain residential subdivisions with lots having no more than six dwelling units on a private subdivision road. (Refer to § 241-9. B.)
  - (2) Major Residential Subdivision is any subdivision that is not a Minor Residential Subdivision, It includes any subdivision road with lots having a total of seven or more dwelling units, or a subdivision with any number of lots or dwelling units on a subdivision road intended to be submitted for acceptance as a public way.
  - (3) Non-residential Subdivision. This type of subdivision is for commercial or industrial uses and differs procedurally from a residential subdivision in that a Preliminary Plan is mandatory, and there are different design and construction standards.
- C. Applicant Team. All parties benefit if the subdivision is considered in all its elements from the earliest stages. Applicants are encouraged to involve from the beginning not only the engineer and land surveyor legally required for the subdivision filing, but also related development design professionals such as planners, landscape architects, architects, wetland scientists, and attorneys, who may eventually be needed to help in meeting the design guidelines of this chapter and to assure proper integration of zoning, land planning, site design, and eventual building design.

D. Sequence.

- (1) **Informal Discussion.** For all but the simplest subdivision projects, it will often prove useful for the applicant to meet informally with the Planning Board and other town boards to discuss the proposed development before investing in extensive professional design efforts. This would allow discussion of general approaches, choice of subdivision type, possible use of simplified minor lane procedures, and potential issues or problems that might need to be resolved or avoided.
- (2) **Preliminary Plan.** Although not mandatory for residential subdivisions, it is strongly recommended that a Preliminary Plan of the subdivision be submitted by the applicant for discussion and tentative approval by the Board. The submission of such a preliminary plan will enable the applicant, the Board, other town agencies (such as DPW, Conservation Commission, Board of Health, Traffic Commission, and Emergency Services), and owners of property abutting the subdivision to discuss and clarify the potential issues of the subdivision before a Definitive Plan is prepared. A Preliminary Plan is mandatory for Non-residential Subdivisions.
- (3) **Definitive Plan.** The term “Definitive Plan” refers to both the final plan of a subdivision and the approval process.
- (4) **Relationship to Zoning and Special Permit Uses.** Several types of development may require approval under both the Subdivision Control Law and the Zoning Bylaw. Approval of a Special Permit may be required before a Definitive Plan can be approved, although both may be submitted simultaneously and have concurrent approval processes. The sequence of applications and approvals should be discussed during the Informal and Preliminary Plan stages. Decision deadline extensions and conditional approvals may be used to reconcile any conflicting deadlines imposed by statutory timelines.

**§ 241-8. Preliminary Plan.**

- A. **Discussion of requirements.** Before preparing the Preliminary Plan, the applicant and his or her land surveyor and professional civil engineer should meet informally with the Board to discuss the requirements for the subdivision of land in the Town of Lee. A Preliminary Plan is optional for a Residential Subdivision and is mandatory for a Non-Residential Subdivision, but is strongly recommended in all cases.
- B. **Submission Requirements.** Any person who seeks approval of a Preliminary Plan shall make submittals to the Board and Town Clerk in accordance with the General Requirements for Submission of Plans, § 241-5.A., and as follows:
  - (1) Eight Copies of all Preliminary Plan application materials;
  - (2) Form B application form signed by applicant and owner of land;
  - (3) Filing Fee;
  - (4) A Consultant Review Fee, if determined necessary by the Board in accordance with § 241-5.D.
- C. **Contents of the preliminary plan.** The Preliminary Plan shall be clearly drawn at a suitable scale not smaller than one inch equal to 100 feet on sheets not smaller than 8 ½” x 11” nor larger than 30” x 42”. The Preliminary Plan shall show sufficient information about the land and proposed Subdivision to form a clear basis for its review, and shall show the following information:
  - (1) The subdivision name, boundaries, North point, date, scale, legend, designation of Subdivision type, and the title “Preliminary Plan.”
  - (2) The names of the record owner, applicant, and the professional civil engineer and land surveyor, and any other design professionals for the project.
  - (3) The names of all abutters as determined from the most recent tax list.
  - (4) The existing and proposed lines of streets, ways, easements and any public or common areas within the subdivision in a general manner.



- (5) The proposed system of drainage, including adjacent natural waterways, in a general manner.
  - (6) The approximate boundary lines of proposed lots with approximate areas and dimensions.
  - (7) The names, approximate location and widths of adjacent streets.
  - (8) The topography of the land in a general manner (10' contour intervals).
- D. Supplemental Submittals. In addition to those items required to be submitted, it is requested that the following information be submitted:
- (1) A locus plan of the Subdivision showing zoning district boundaries and the street configuration in relation to the surrounding area, at a scale no smaller than 1" = 1000'.
  - (2) A brief narrative description of the project approach, including selection of type of Subdivision, whether the Subdivision Road is intended to remain a private way owned and maintained by a homeowners' association, or is intended for acceptance as a public way.
  - (3) A list of waivers to be requested.
  - (4) The location, size and direction of flow of existing and proposed sewers, sewage pump systems, water mains, fire protection measures, and other utilities, in a general manner.
  - (5) Soil types and conditions as well as a description of the natural surface and subsurface drainage and its effect on the total project design, in a general manner.
  - (6) The proposed building sites or "building envelopes" in a general manner.
- E. Completeness Review. The Planning Board shall review the application for completeness in accordance with § 241-5. B, using a checklist to review the application materials for fulfillment of the preliminary plan requirements. If all data is included, the Board shall distribute the Preliminary Plan application and continue processing. If the application does not contain all required data, the Board shall require additions and corrections prior to further processing.
- F. Distribution of preliminary plans. Of the eight copies of the Preliminary Plan application materials, the Board retains two sets, and the Applicant submits one set to the Town Clerk. The Board will distribute the other five sets to town reviewing agencies as follows: the Board of Health, the Department of Public Works, Conservation Commission, Traffic Commission, and Emergency Services (Fire, Police, Ambulance).
- G. Action by town reviewing agencies. Within 30 days of the submission date of the preliminary plan, all town reviewing agencies are requested to submit their comments and recommendations to the Board. Failure to submit comments shall be deemed to indicate no objection.
- H. Action by the Planning Board. Within 45 days after the date of submission of the Preliminary Plan, the Board will conduct a public meeting with the applicant and the professional civil engineer and/or land surveyor for the project. Town agency representatives and abutters may also be invited to attend. At this meeting, the Preliminary Plan will be discussed including any requested waivers, comments or recommendations by town agencies. The Board will then vote and will give written notification of its action to the applicant and the Town Clerk, either that the Preliminary Plan has been approved as submitted, approved with modifications recommended by the Board or agreed upon by the applicant, or that the Preliminary Plan has been disapproved. In the event of disapproval, the Board shall state in detail its reasons therefor. Approval of a Preliminary Plan does not constitute approval of the Subdivision.

**§ 241-9. Definitive Plan.**

- A. Submission Requirements. Any person who seeks approval of a Definitive Plan shall make submittals to the Board and Town Clerk in accordance with the General Requirements for Submission of Plans, § 241-5.A., and as follows:
- (1) Eight Copies of all Definitive Plan Application Materials described below;
  - (2) Form C application form signed by applicant and owner of land;
  - (3) A list of the names and addresses of Abutters from the most recent assessors' records certified by the Lee Assessors, including property owners directly opposite the property along any streets abutting the Subdivision, and abutters to abutters within 300 feet from the Subdivision property;
  - (4) Filing Fee;
  - (5) Consultant Review Fee, if determined necessary by the Board in accordance with §241-5. D. above. (Note: remittance of the review fee will normally be deferred until after the Board finishes its initial completeness review of the application materials and selects its Consultant(s), if necessary.)
- B. Minor Residential Subdivision.
- (1) Applicability and intent. It is the intent of the Board that a small subdivision served by a private way should be permitted without difficulty. It is assumed that this type of small subdivision will have a very minor impact on municipal utilities, traffic, and on the character of the neighborhood. Accordingly, the Applicant may request that their proposed development be reviewed as a Minor Residential Subdivision if it meets the definition and requirements for such a development. The application materials required and the construction standards for such privately owned Minor Residential Lanes are less stringent than for a standard subdivision. Application under this section is optional. Any subdivision may be submitted as a standard ("Major") Subdivision.
  - (2) Limiting Agreements. Any subdivision plan approved as a Minor Residential Subdivision must be accompanied by legal documents that conform to the following limiting agreements and conditions:
    - (a) The subdivision way shown on the plan shall be a private way owned and maintained by the owners of the lots shown on the plan.
    - (b) A Homeowners' Association ("HOA") shall be formed and a covenant shall be placed in all the deeds of the lots shown on the plan covenanting that the road and drainage system serving the private way shall never be submitted to the town for acceptance or maintenance as a public way.
    - (c) No land shown on the plan may be further subdivided, except for lot line adjustments that do not create any new building lots.
    - (d) The private subdivision way may never be extended nor serve as frontage or access for any additional lots or dwelling units.
    - (e) The covenants, deed restrictions, and Homeowners' Association documents shall be submitted to the Board, and notes referencing the documents shall be endorsed onto the final Definitive Plan to be recorded.
  - (3) Simplified development submittals and construction standards.
    - (a) Submittals made for Definitive Plan approval under Minor Residential Subdivision procedures may omit as much of the application materials as the Board may authorize in any specific case, except the following which must be submitted: a recordable lot plan, a road plan and profile, and a typical cross section of the proposed roadway. A determination of required application materials should be made during the Preliminary Plan process. In most cases, it is likely that the municipal impact report will include only a minimal statement of estimated water and sewer flows, estimated Average Daily Traffic based on 10 trips per dwelling unit per day, and an abbreviated analysis of storm drainage. In specific cases, the Board, in consultation with other town agencies such as the Conservation Commission and DPW, may determine that additional detail is required.

- (b) The standards included in these regulations for design and construction of a Minor Residential Subdivision are minimized consistent with the very low volume of traffic that will be generated. The minimum street width and cross section are indicated in Tables 3.1 and 3.2 and the typical cross sections in the appendix. The construction details and specifications for the roadway and utilities, however, remain the same as a standard subdivision.
  - (c) Where applicable, easements shall be conveyed to the Town of Lee for operation and maintenance of the water mains, valves and hydrants, and the sanitary sewer mains and sewer manholes. The HOA and easement documents shall stipulate that the responsibility of the Town of Lee for repairing trenches or roadways dug up during repair or replacement of water or sewer lines within the utility easement shall be limited to backfilling and compacting the trenches up to the established grade. Any other repairs to pavement, sidewalks, lawns, etc. shall be the responsibility of the HOA.
- C. **Definitive Plan Application Materials.** The Definitive Plan application materials shall be prepared by a professional civil engineer and/or land surveyor registered in the Commonwealth of Massachusetts. Where applicable, other materials may be prepared by other individuals. The Definitive Plan application shall include all of the materials listed below unless the Board has previously agreed to waive any required submittal during the Preliminary Plan approval process, in which case the requested waiver shall be indicated on the application checklist. (Note: Refer to Subsection §241-9. B. for reduced requirements for Minor Residential Subdivisions.) The application materials shall include the following as itemized below:
- Lot Plans.....Subsection D.
  - Site Plans and Construction Plans ... Subsection E.
  - Municipal Impact Report ..... Subsection F.
  - Drainage Analysis ... Subsection G.
  - Legal Documents .....Subsection H.
- D. **Lot Plans.** The sheet size, media, and format for recordable lot plans shall comply with the contemporary requirements of the registers of deeds. If multiple sheets are used, an index plan shall be submitted showing the entire subdivision. If possible, each lot shall be shown in its entirety on one sheet. The final recordable plan(s) shall be provided to the Board only when actual signing of the plan is to take place. The Lot Plan shall include the following:
- (1) Subdivision name and the title “Definitive Plan”; boundaries of the property; North point; legend; and the date, scale and title in a title block in the lower right-hand corner.
  - (2) Names and addresses of the record owner and applicant.
  - (3) Names, addresses, seals and registration numbers of applicant’s engineer and surveyor.
  - (4) Names of all abutters as they appear in the most recent assessors records.
  - (5) Existing and proposed lines and widths of all public and private streets, ways and any public areas within the subdivision.
  - (6) Location, dimension and status of all easements, existing or proposed, within, abutting and adjacent to the subdivision.
  - (7) Sufficient data to determine readily the location, direction and length of every public and private street and way, lot line, easement line and boundary line and to establish these lines on the ground.
  - (8) Location of all permanent property corner markers and monuments, properly identified as to whether existing or proposed.
  - (9) Boundary lines, areas and dimensions of all proposed lots, designated numerically and in sequence, plus street names and street address numbers approved by the town’s E-911 coordinator.

- (10) Suitable space to record the action and signatures of the members of the Board, the Town Clerk and the Board of Health.
- E. Site Plans and Construction Plans. Plans showing existing and proposed conditions and construction as itemized below:
- Locus Plan
  - Street plans and profiles and typical cross sections for every proposed street.
  - Utility plans and details.
  - Storm Drainage System Plans and Details, including methods of stormwater mitigation.
  - Topographic plan of existing subdivision property.
  - Site plans showing proposed building sites or "building envelopes."
  - Erosion and sedimentation control plan.
- (1) A locus plan of the Subdivision showing zoning district boundaries and the street configuration in an area at least 1000 feet surrounding the subdivision, at a scale no smaller than 1" = 1000'.
- (2) Overall Site Plan at a scale no smaller than 1"=100' showing existing topography of the entire subdivision with contour intervals of at least 10' and proposed locations of the roads, lots, utilities, drainage system, and approximate building sites or "building envelopes," open space areas, wetlands, floodplains, areas subject to scenic mountains regulations, scenic roads, and other features of the site. All elevations shall refer to a U.S.G.S. bench mark and its location shall be stated.
- (3) Proposed Grading Plan of the developed portion of the subdivision at a scale no smaller than 1"=40' with 2 foot contour intervals, showing existing and proposed spot contours and elevations at the intersection of all proposed lot lines and at such other points as to accurately convey the proposed finished grading of the subdivision in accordance with the requirements of the Planning Board and Board of Health. Grading shall take into account the requirements for on-site subsurface sewage disposal systems, where applicable, surface drainage, and adequate driveway access from the subdivision way to buildable parts of the subdivision lots.
- (4) Road Plan and Profile Plan(s) for each street in the subdivision on a separate sheet. Plans shall be drawn at a scale no smaller than 1"=40' and shall show:
- (a) Right of way width and side lines, center line, road stationing along centerline, radius of curves, points of tangency, lengths of tangents and curves, angles between intersecting streets;
  - (b) Proposed roadway together with all buildings, walks, drives and other existing and proposed features within 40 feet of the side lines of such street.
  - (c) Proposed utilities including storm drainage system, water supply, sanitary sewer system, natural gas, electric, telephone and cable TV lines, street lighting, and other facilities and appurtenances, giving size and material of all lines, invert and rim elevations, and whether utilities are proposed to be public or privately owned and maintained.
  - (d) Profiles at a minimum horizontal scale of 1"=40' and a vertical scale of 1"=4' (10:1 vertical exaggeration) showing existing grades along the centerline and side lines, and proposed finished grade at the centerline, together with existing and proposed elevations at fifty foot intervals along the road, slopes of proposed tangents in percent, and proposed vertical curve data including length of vertical curve, Algebraic Difference of percent grades entering and leaving the curve ("A.D."), ratio of length of vertical curve to percent change in grades ("K" value), and high or low point if applicable. Intersecting roads shall be clearly indicated on the profile. The design criteria for the road shall be indicated, including design speed and minimum stopping sight distance for horizontal and vertical curvature and the equivalent "K" values. (Note: utility plans and profiles may be on a separate sheet if necessary),
  - (e) Details and Typical Cross Sections each type of roadway and proposed utilities.
- (5) Proposed Storm Drainage Mitigation Measures, including plans, profiles, details, cross sections and operation and maintenance procedures for the proposed system of mitigating the increase in rate and volume of stormwater runoff and water quality impacts. (Note: a copy of a Wetlands Protection Act Notice of Intent for the proposed project may be submitted in compliance with this section.)

- (6) Erosion and Sedimentation Control Plan for construction of the entire subdivision, including roadway, utilities, storm drainage system, and for control of stormwater runoff during construction of individual building sites. (Note: a draft Stormwater Pollution Prevention Plan – “SWPPP” – required under EPA Stormwater regulations may be submitted in compliance with this section.)
- (7) Proposed Landscaping Plan including location and species of proposed street trees and wooded areas to be retained within 40 feet of the side lines of each street and location and species of street trees and wooded areas to be added within 40 feet of the side line of each street

F. Municipal Impact Report including:

- (1) Detailed narrative description of the project approach, including selection of type of Subdivision, whether the Subdivision Road is intended to remain a private way owned and maintained by a homeowners’ association, or is intended for acceptance as a public way, and a description of differences or changes made between Preliminary Plan and Definitive Plan.
- (2) Description of the natural environment, including soil types and vegetative conditions, topographic conditions, areas of slopes greater than 15%, waterways, wetlands or floodplain, and features with special environmental, scenic or historic significance.
- (3) List of other permits that will be required, e.g. Wetlands Protection Act, utility connection, etc.
- (4) Analysis of impacts of proposed subdivision on municipal utilities based on the maximum allowable number of dwelling units within the proposed subdivision including water supply and distribution system, fire protection system, sewer collection and treatment system, storm drainage system on-site and downstream of subdivision.
- (5) Statement of estimated impacts on other municipal facilities including school population and solid waste disposal.
- (6) A Traffic Impact Analysis. Any subdivision that will generate 400 or more vehicle trips per day estimated according to current Trip Generation guidelines will be required to submit a detailed traffic impact analysis. Subdivisions with trip generation rates of 200 to 400 trips per day will require an abbreviated traffic analysis. Smaller subdivisions will generally require only a trip generation analysis for the morning and afternoon peak hours.
- (7) Statement of compatibility with established or future character of the neighborhood, and with the Town of Lee Master Plan and Open Space Plan.

G. Storm Drainage Analysis. Analysis of on-site and off-site drainage impacts, and design of mitigation measures. (Refer to Section 241-21 for specifics of drainage analysis and design criteria.)

H. Legal Documents. Draft copy of legal documents for any proposed homeowners’ association, maintenance agreement, covenants, easements, or deed restrictions proposed for the Subdivision.

I. Review by the Board. The Applicant shall submit a completed Form C-1 Checklist with the Definitive Plan Application. The Board shall, at a regular meeting of the Board, use the checklist to review the application materials for completeness and fulfillment of the Definitive Plan requirements as specified in Section 241-5. B. If all data is included, The Board shall distribute the Definitive Plan application and continue processing. If the application does not contain all required data, the Board shall require such additions and corrections prior to further processing of the application. The Applicant shall agree in writing to extend the statutory time period for approval by the number of days between the date of the Board’s determination that the application is incomplete and the date when the Board receives the required information and determines the application is complete. The Board shall file with the Town Clerk a written notice stating the date and details of the incomplete application and the date of receipt of the supplemental information completing the application. An incomplete application shall be grounds for the Board to disapprove the application.

- J. Distribution of Definitive Plans. After the Board determines the application is complete, the Board shall distribute the eight copies of the Definitive Plan application materials as follows: the Board retains two sets, and the Applicant submits one set to the Town Clerk. The Board will distribute the other five sets to town reviewing agencies as follows: Board of Health, Department of Public Works, Conservation Commission, Traffic Commission, and Emergency Services (Fire, Police, Ambulance, 911 Coordinator).
- K. Review by the Board of Health. Within 45 days after the Definitive Plan is filed with the town clerk, the Board of Health shall report to the Planning Board in writing its approval or disapproval of the plan. Failure of the Board of Health to report within 45 days shall constitute its approval. In the event of disapproval, the Board of Health shall make specific findings as to which, if any, areas shown on such plan cannot be used for building sites without endangering public health. The Board of Health's report shall include these specific findings and the reasons supporting the findings. Where possible, The Board of Health shall make recommendations for changes that would allow building. The Board of Health shall also send a copy of its report to the applicant. Any approval of the plan by the Planning Board shall only be given on condition that no building or structure shall be built or placed upon the areas disapproved by the Board of Health without the prior written consent of the Board of Health. The Planning Board shall endorse on the plan such conditions, specifying the lots or land to which said condition applies. Any lot so located that it cannot be served by connection into a sanitary sewer shall be provided with a subsurface sewage disposal system satisfactory to the Board of Health
- L. Action by other Town Reviewing Agencies. Within 45 days after the Definitive Plan is filed with the town clerk, the town reviewing agencies are requested to submit their comments and recommendations to the Board. Failure to submit comments within 45 days shall be deemed to indicate no objection.
- M. Public hearing. Before approval, approval with modifications, or disapproval of the Definitive Plan, the Planning Board shall hold a public hearing. Notice of the hearing shall be given by the Board at least 14 days prior thereto by advertisement in a newspaper of general circulation in the Town of Lee once in each of two successive weeks, the first publication being not less than 14 days before the day of the hearing. The notice shall contain the date, time and place of the hearing and its subject matter, sufficient for identification. A copy of said notice shall also be mailed to the applicant and to all Abutters. The applicant, his or her engineer and his or her land surveyor shall be present at the public hearing. Before adjourning the Public Hearing, the Board will announce the specific date, time and place of any continuance of the Public Hearing.
- N. Decision.
- (1) Decision Criteria. After the public hearing is closed, the Board in due course will approve, modify and approve, or disapprove the Definitive Subdivision Plan submitted. Criteria for action by the Board shall include the following:
- (a) Completeness and technical adequacy of all submissions.
  - (b) Determination that the existing ways providing access to the subdivision road are adequate for the increased traffic and for access by emergency vehicles, and that the subdivision road will provide safe and adequate access to a buildable portion of each building lot shown on the plan. (Refer to Adequacy of Access, §241-5. C.)
  - (c) Conformity with the requirements of Article IV, Design and Construction Requirements, subject to any waivers where approved by the Board.
  - (d) Conformity with the recommendations of the Board of Health.
  - (e) Conformity with all applicable zoning requirements.
  - (f) Demonstration by the Applicant that the subdivision design has given due consideration to applicable development guidelines in the appendix.
  - (g) Demonstration by the Applicant that the design includes measures to avoid or minimize unnecessary disturbance to the site, especially environmentally sensitive areas such as wetlands, floodplains, wildlife habitat areas, scenic or historic areas, undue disturbance of scenic roads, building on areas of steep slopes, constructing overly deep cuts or fills, or other locally sensitive

conditions, and that alternative designs have been implemented to minimize and mitigate any unavoidable alteration of these assets.

(h) Consistency with the Purposes of these Subdivision Regulations (§ 241-1. D.).

(2) Deadlines for action.

- (a) If a Preliminary Plan was filed for a Residential Subdivision, the Board must file with the Town Clerk a certificate of the Board's action on the Definitive Plan within 90 days following the date of submission of the plan, or such further time as may be agreed upon at the written request of the Applicant.
- (b) Where no Preliminary Plan was submitted, a certificate must be submitted within 135 days following the date of submission, or such further time as may be agreed upon at the written request of the Applicant.
- (c) The deadline for action may be extended by written request of the applicant that is accepted by the Board. The notice of extension shall be filed with the Town Clerk within the previous deadline.

(3) Certificate of action.

- (a) The action of the Board shall be by vote, a certificate of which shall be filed by the Board with the Town Clerk, and a copy sent by certified mail to the applicant. If the Board modifies or disapproves such plan, it shall state in its certificate the detailed reasons for its action.
- (b) The Board may impose reasonable conditions it deems necessary to assure that the subdivision conforms to the purposes and requirements of these Subdivision Regulations. The Board may specify a timeframe within which the subdivision road and utility improvements must be begun and construction completed.
- (c) Final approval, if granted, shall be endorsed on the original drawing of the definitive plan by the signatures of a majority of the Board, but not until the statutory twenty-day appeal period has elapsed following the filing of the certificate of the action of the Board with the Town Clerk, and said Clerk has notified the Board that no appeal has been filed.
- (d) The Planning Board shall send a copy of its Certification of Action (Approval, Disapproval, or Approval with Conditions) to the other town reviewing agencies, including a list of the conditions of approval.
- (e) Any other Conditions of Approval imposed by the Planning Board or Board of Health shall be endorsed on the Definitive Plan, or included in a separate instrument to be recorded therewith and referred to on the Plan.
- (f) Final approval of the definitive plan does not constitute the laying out or acceptance by the town of streets, utilities or other infrastructure within a subdivision.

(4) Submission of final documents.

- (a) Within ten business days after the date of the Board endorsing the final recordable Definitive Plan, the Applicant shall submit eight sets of the Definitive Plan (Lot Plan) and Construction Plans, revised to incorporate any changes or conditions imposed by the Board. Of the eight sets of final approved plans signed by the Board, the Board will retain two sets, and distribute the remaining sets to the Town Clerk, Board of Health, Department of Public Works, Conservation Commission, and Emergency Services coordinator (Fire, Police, Ambulance), and Building Inspector/Zoning Enforcement Officer.
- (b) The Applicant shall submit to the Board the proposed Easement documents, Homeowners Association documents, maintenance agreements, deed restrictions, and other instruments agreed to by the Applicant as a condition of approval, within 60 calendar days from the date of approval of the definitive plan to the Board, unless the time period has been extended in advance by the Board. The Board will submit the documents to the Town Counsel for approval as to form and legality. Proposed Easement documents shall also be submitted for approval by the appropriate town boards, commissions or committees. Failure of the Applicant to submit required easements or other instruments shall be full and sufficient reason for rescission of the approval of the subdivision in accordance with M.G.L. Ch. 41 §81-W.

O. Performance guarantee; Completion Period. Before the Planning Board endorses its approval of a definitive plan, the applicant shall agree to complete without cost to the town all improvements required by this

regulation, and shall provide a Performance Guarantee or surety to assure proper completion of construction of ways and utilities required for the lots in the subdivision. The Performance Guarantee may also require completion of the road and utility improvements within a specified period of time.

- (1) Forms of Guarantee: The Performance Guarantee shall be provided in one or more of the forms specified by M.G.L. Ch. 41 §81-U, as follows:
  - (a) A bond.
  - (b) A deposit of money or negotiable securities.
  - (c) A Lender Agreement.
  - (d) A Covenant, executed and recorded, running with the land, whereby the improvements shall be provided to serve any lot before such lot may be conveyed or built upon. A note shall be inscribed on the recorded Definitive Plan or a separate instrument recorded referencing the Covenant.
- (2) Security amount. If the completion is secured by a financial guarantee listed above as (a), (b) or (c), the amount shall be determined by the Board. Applicant shall submit a completed copy of Form D-3 with estimated costs for review by the Board. Costs shall include all construction costs plus the following:
  - (a) The cost to the town should it be obliged to install the required improvements, included supervision, bidding and state wages rates;
  - (b) Maintenance for one year;
  - (c) Inflation over the time allowed for completion of work; and
  - (d) Ten-percent contingency.
- (3) Enforcement of Construction Upon Failure of Performance. Any financial guarantee may be applied by the Planning Board for the benefit of the town, as provided in M.G.L. Ch. 41, §81-Y, upon the applicant's failure of the performance for which the guarantee was given, to the extent of the reasonable cost to the town of completing such construction and installation.
- (4) Release of Performance Guarantee. When the applicant has completed some or all of the improvements required by the approved Definitive Plan for lots in the subdivision, the applicant may request a partial or final release of the Performance Guarantee for the lots. The applicant shall submit such a request on Form F-1. An inspection of the completed work shall be performed by the Board or its designated representative. (Refer to § 241-15. B.) If the improvements have been partially or totally completed to the satisfaction of the Board the Board will issue a Certificate of Partial or Final Release of Performance Guarantee, releasing the applicable portion of the Performance Guarantee.
  - (a) Partial Release of Performance Guarantee. The Board may, from time to time, reduce the amount of any financial guarantee in whole or in part or the number of lots held under the Covenant. The amount of the remaining Performance Guarantee shall reflect the estimated cost of the work remaining to be completed.
  - (b) Before the Board releases any Performance Guarantee in whole or in part, the subdivider shall file with the Board a Form E-1 Certificate of Completion, prepared by and stamped by a registered Massachusetts professional civil engineer and/or land surveyor, where applicable, indicating that streets, utilities and other required improvements have been constructed in accordance with and are accurately located as shown on the plans approved by the Board. Any deviations or changes from the approved plans shall be indicated on a set of Record Plans submitted to the Board with the Certificate of Completion. The subdivider shall also furnish to the Board a certificate that he or she has complied with all the requirements of Article III and IV of these regulations.
  - (c) If the Board determines that the construction has been satisfactorily completed in whole or in part, it shall, within 45 days, release the applicable portion of the Performance Guarantee.
  - (d) If the Board determines that the construction has not been satisfactorily completed, it shall specify in a notice, sent to the applicant and Town Clerk by registered mail or hand delivery, with the specifics of the deficiencies or incomplete portions of the work as shown on the approved plans or how it fails to comply with the Subdivision Regulations.



- (e) If the request is for a partial release of a Covenant that would release one or more building lots for sale or building construction, the portion of the subdivision road and utilities shall be substantially completed, sufficient to provide adequate access and utilities to the released lots.
- (f) Failure of the Planning Board to act on an application for release of a Performance Guarantee within 45 days after receipt by the Board of the application during the period specified below shall relieve all obligations under the performance guarantee and terminate by operation of law any deposit, which shall be returned, and any such covenant shall become void. In the event that the forty-five-day period expires without such specification or without the release and return of the bond or return of the deposit or release of the covenant, the Town Clerk shall issue a certificate to this effect which may be recorded.
- (g) Action on Release of performance guarantee only during suitable weather conditions. In order to assure that the town agencies can perform an inspection of the work requested for release of performance guarantee, under reasonable weather conditions, the applicant shall schedule its applications for release of Performance Guarantee to occur only between March 1 and November 30. No application for release shall be submitted between December 1 and February 28.

**ARTICLE III  
Design Standards**

**§ 241-10. General Design Standards.**

- A. Basic Requirements. All streets in a subdivision shall be designed so that, in the opinion of the Board, they will provide safe vehicular travel and afford access to the lots in the subdivision by police, fire-fighting, ambulance, snow removal and other road maintenance equipment. The roadway system shall also be designed to create a convenient, attractive, and environmentally sensitive network. Due consideration shall also be given by the subdivider to the attractiveness of the street layout and its adaptation to the existing topography in order to obtain the maximum livability and amenity of the subdivision. Curvilinear street design is encouraged. All streets shall be arranged so as to obtain as many of the building sites as possible at or above the grade of the streets.
- B. The proposed subdivision design, including street types and roadway design characteristics shall be compatible with applicable portions of the Town of Lee Master Plan and the design guidelines in the appendix of these Subdivision Regulations.
- C. The specific criteria for design and construction of the street or streets in the subdivision shall be determined by reference to the following. This determination is best made early in the design process by the applicant consulting with the Board with informal sketch plans and/or submission of a Preliminary Plan.
  - (1) Refer to zoning bylaws for minimum required lot density, frontage, and yards.
  - (2) Refer to applicable portions of the Town of Lee Master Plan.
  - (3) For each street in the subdivision, determine the Street Type based on Number of Lots and Dwelling Units, Total Average Daily Traffic, Public or Private Ownership, Through Road or Dead End Road, Topography, Availability and adequacy of Municipal Utilities and Fire Protection, and other local conditions.
  - (4) Refer to Table 3.1 for Subdivision Street Hierarchy Definitions.
  - (5) Refer to Table 3.2 for Street Design Criteria.
  - (6) Refer to the other sections of Article III for design requirements.
  - (7) Refer to Article IV for Construction Requirements.
  - (8) Consult with Lee DPW and emergency services departments regarding utilities and other local requirements and conditions.

Street Type – Dead-end or Through – (Ownership)	<b>TABLE 3.1</b> <b>SUBDIVISION STREET HIERARCHY DESCRIPTIONS</b> <b>Street Description</b>	Maximum Average Daily Traffic (ADT)
<b>MINOR RESIDENTIAL SUBDIVISION STREET</b>		
<b>Rural Minor Lane</b> – Cul-de-sac or Loop Road – (Private)	This is a rural residential street that serves as frontage and access for a very low-density/low-impact subdivision having no more than six lots or six dwelling units. This is the lowest order of residential streets. It is either a dead end (cul-de-sac) or short loop road that provides frontage and access only to lots within the subdivision. It does not serve as a through street that would carry traffic to other streets. It cannot be used if there is a possibility of future subdivision either on the lane or an extension of the lane onto adjacent unsubdivided property. It is designed to carry the least amount of traffic at the lowest speed. This street shall be privately owned and maintained by the owners of the lots served by the street, and shall not be eligible for acceptance or maintenance as a public way. However, municipal water or sewer facilities in any private ways may be accepted and maintained by the Lee DPW. This street shall be proposed only as part of a Minor Residential Subdivision with a simplified process for design, application, and permitting.	60 total
<b>MAJOR RESIDENTIAL SUBDIVISION STREETS</b>		
<b>Rural Lane</b> – Cul-de-sac or Loop road – (Private or Public)	This is a rural residential street that serves as frontage and access for a low-density subdivision, or portion thereof, serving no more than ten lots or ten dwelling units. This is within the lowest order of residential streets. It is either a dead end (cul-de-sac) or short loop road that provides access only to lots that have frontage on it. It does not serve as a through street that would carry traffic to other streets. It is designed to carry a very low volume of traffic at the lowest speed. This street may be either privately owned and maintained by the owners of the lots served by the street, or it may be proposed for acceptance and maintenance as a public way.	100 total
<b>Rural Residential Access Street</b> – Loop Road or Through Road – (Private or Public)	This is a rural residential street that serves as frontage and access for a low-density subdivision having no more than ten lots or ten dwelling units. This is a low order residential street. It is either a loop road or a through road between other streets. It is designed to provide frontage and access primarily to lots within the subdivision, but may also carry some traffic to other streets. It is designed to carry a small amount of traffic at low speed. This street may be either privately owned and maintained by the owners of the lots served by the street, or it may be proposed for acceptance and maintenance as a public way.	100 on frontage – 200 total
<b>Residential Neighborhood Street</b> – Through Road – (Private or Public)	A type of residential access street that serves a larger neighborhood type of subdivision with moderate density. The subdivision street design pattern may follow a typical subdivision street layout, or it may (preferably) follow a more conservation-minded open space or cluster-type design. This residential neighborhood street may provide the main access for up to twenty (20) house lots or twenty dwelling units, fronting on the street, and may also function as a through road for other smaller streets or cul-de-sacs in the subdivision or in the neighborhood. The maximum ADT limits it to a total of 40 lots either on frontage or used by pass-through traffic. It will usually have sidewalks on one or both sides of the street. It may have a widened cross section to allow some on-street parking on one or both sides.	200 on frontage – 400 total

<b>Street Type – Dead-end or Through – (Ownership)</b>	<b>TABLE 3.1 SUBDIVISION STREET HIERARCHY DESCRIPTIONS</b>  <b>Street Description</b>	<b>Maximum Average Daily Traffic (ADT)</b>
<b>Residential Major Access Street – Through Road – (Private or Public)</b>	A middle order of residential access street that serves larger subdivisions or established neighborhoods. The major access street is designed to serve primarily traffic generated in the immediate neighborhood. It is not intended to carry regional traffic or large scale developments or resorts. It may also serve as access to house lots along its frontage. This residential access street may provide the main access for up to forty (40) house lots or forty dwelling units fronting on the street, and may also function as a through road for other smaller streets or cul-de-sacs in the subdivision or in the neighborhood. It must be a through road, and the two legs of the looped road may each serve up to 40 lots or forty dwelling units. The street will normally have sidewalks on both sides of the street. It may have a widened cross section to allow on-street parking on one or both sides.	400 on frontage – 400 total (per leg of a loop road)
<b>COLLECTOR STREETS</b>		
<b>Minor Collector Street Through Road – (Public)</b>	A high order of residential access street that serves as a through street for the neighborhood, collecting traffic from other adjoining residential access streets and rural streets. It also provides frontage for access to lots along the collector. It could serve as the main entrance road for a larger residential subdivision or resort, depending on the Average Daily Traffic. It is designed to carry somewhat higher traffic volumes than lower-order streets, but it is not intended to carry regional traffic. Average Daily Traffic along this street is a maximum of 1000 trip ends per day including lots along its frontage and through traffic. (This is equivalent to about 100 single-family dwelling units or about 140 apartments units.) Design criteria for this type of Street should conform to the applicable AASHTO and/or Mass. Highway Department standards for design of Highways and Streets in effect at the time the project is undertaken. The street will normally have sidewalks on both sides of the street and may be widened to allow on-street parking on one or both sides. Street must be offered to town for acceptance as a Public Way unless it is part of a private development or resort.	1000 trips per day maximum – combination of frontage lots and through traffic
<b>Major Collector Street Through Road – (Public)</b>	Highest order of residential streets. Designed to conduct and distribute traffic between lower-order residential streets and higher-order regional streets and highways. Carries a higher volume of traffic at higher speeds. Primary function is to provide free traffic flow; therefore, parking should be limited or prohibited and direct access to dwellings from this level of street should be minimized or prohibited. It could serve as the main entrance road for a very large residential subdivision or resort, depending on the Average Daily Traffic. Average Daily Traffic along this exceeds 1000 trip ends per day including lots along its frontage and through traffic. Design criteria for this type of Street should conform to the applicable AASHTO and/or Mass. Highway Department standards for design of Highways and Streets in effect at the time the project is undertaken. The street will normally have sidewalks on both sides of the street and may be widened to allow on-street parking on one or both sides. Street must be offered to town for acceptance as a Public Way unless it is part of a private development or resort.	Greater than 1000 trips per day, including dwellings along frontage and through traffic from lower-order streets

<b>SPECIAL PURPOSE STREETS</b>		
<b>Divided Streets</b>	Divided Streets may be used as a second means of access and egress. Design standards shall be applied to the combined dimensions of the two street segments, as required for the Street Type. For example, if the ADT of the project required the entrance drive to have a paved width of 24', the two lanes of the divided street would have to add up to at least 24', plus offsets for curbs and the median. The median shall have a minimum width of 20 feet and, in combination with the traveled width, mountable curb, shoulder, and/or sidewalk, shall provide at least 24 feet of usable width on each lane to provide for two way emergency access on one lane of the divided street in case the other lane is blocked. Divided Streets shall have a cut through at maximum intervals of 1000 feet with sufficient width and turning radius for cars, trucks and emergency vehicles to make a U-turn.	Varies
<b>Entrance Drives to Large Residential Developments</b>	Planned Unit Residential Development, Cluster or Multi-family Residential Access Roadways shall be designed according to the Street Type for the volume of traffic for each section of the development. The main entrance road(s) shall be designed with capacity for the entire development and shall provide for emergency access. Any portion of the development with more than 40 units shall have at least two access points from a public way, having sufficient capacity, construction, width, and grade, in the opinion of the Planning Board, to accommodate the proposed new traffic.	Varies
<b>Resort Roadways</b>	Resort Roadways shall be designed according to the Street Type for the volume of traffic for each section of the development. The main entrance road(s) shall be designed with capacity for the entire development and shall provide emergency access. Any portion of a Resort with more than 40 units shall have at least two access points from a public way with sufficient capacity, construction, width, and grade, in the opinion of the Planning Board, to accommodate the proposed new traffic.	Varies
<b>Industrial and Commercial Access Roads</b>	Design standards for Industrial and Commercial Access Roads or Driveways should conform to the applicable AASHTO standards for Highways and Streets in effect at the time the development is proposed, based on the traffic volumes and vehicle use characteristics of the project.	Varies

<b>TABLE 3.2 STREET DESIGN CRITERIA</b>	<b>MINOR RESID. SUBD. Private</b>	<b>MAJOR RESIDENTIAL SUBDIVISION Public or Private Eligible for Acceptance</b>				<b>COLLECTOR ROAD Public or Private Eligible for Acceptance</b>	
	<b>RURAL MINOR LANE -- Private Only Cul-de-sac</b>	<b>RURAL LANE -- Cul-de-sac</b>	<b>RURAL RESIDENTIAL ACCESS STREET -- Through Road</b>	<b>RESIDENTIAL NEIGHBORHOOD ST Through Road</b>	<b>RESIDENTIAL MAJOR ACCESS ST -- Through Road</b>	<b>MINOR COLLECTOR ST Low - Med Intensity</b>	<b>MAJOR COLLECTOR ST Med - High Intensity</b>
TOTAL AVG DAILY TRAFFIC (note b)	60	100	200	400	400 (per leg)	1000	>1000
MAX. # OF DWELLING UNITS ON FRONTAGE (note c)	6	10	10	20	40	80	NR
DESIGN SPEED (mph)	20	20	20	25	30	30	35
MIN. WIDTH OF PAVED SURFACE (Not Incl Parking Lanes)	20'	20'	20'	24'	24'	24'	28'
CURB OR SHOULDER (note e)	2 GS @ 2' EA	2 GS @ 2' EA	2 GS @ 2' EA	2 MC @ 2' EA	2 VC W/ 2' OFFSET	2 VC W/ 2' OFFSET	2 VC W/ 2' OFFSET
TOTAL TRAVELED WIDTH Incl. Shldrs or Mountable Curbs (Not Incl. Parking Lanes)	24'	24'	24'	28'	28'	28'	32'
RADIUS OF PAVEMENT EDGE OR CURB AT INTERSECTION	15'	15'	20'	25'	25'	30'	30'
SIDEWALK OR LANDSCAPE STRIP (note f)	2 LS	2 LS	2 LS	1 SW 1LS	2 SW	2 SW	2 SW
MIN. WIDTH OF RIGHT OF WAY	40'	50'	50'	50'	60'	60' MIN.	60' MIN.
MAX. LENGTH DEAD END (note g)	600'	800'	NA	NA	NA	NA	NA
MAX. GRADE	12.0%	10.0%	10.0%	7.5%	7.5%	7.5%	5.0%
MIN. CENTERLINE RADIUS	100'	100'	100'	100'	200'	200'	300'

See Notes to Table 3.2 on following page.

NOTES TO TABLE 3.2 -- Street Design Criteria:

- a See Table 3.1 for Subdivision Street Hierarchy Descriptions.
- b Total Average Daily Traffic (ADT) means the number of vehicles that pass over a given point on an average day. It may include only local traffic, or also provide connecting service to other major access roads.
- c Maximum Number of Dwelling Units on Frontage of the Road means the number of houses or other dwelling units that directly front on the road and from which access to the unit is provided. This may be fewer units than would otherwise be allowed by the ADT, to account for pass-by traffic using a through road. Design shall be limited to whichever design criteria is less.
- d Paved Surface is the width of the main part of the traveled way and does not include width of parking lanes. Lots along streets without parking lanes shall be designed to provide off-street parking and driveway access shall be designed with on-lot turnarounds so vehicles do not have to back out of lots into the street.
- e Curb or Shoulder Key: GS = Gravel Shoulder, 2' wide; MC = Mountable Curb, 2' wide; VC = Vertical Curb; offset is the dimension from nominal edge of traveled way to the face of curb.
- f LS = Landscape Strip (with Grass and/or Street Trees); SW = Sidewalk; 1 SW + 1LS indicates sidewalk on one side of road and Landscape Strip on opposite side.
- g Length of Dead-end road is measured from the edge of the nearest through road to the beginning of the turnaround. A divided-type entrance roadway to at least the first cross street may be allowed to provide two means of access and egress avoiding dead-end road limitation.

**§ 241-11. Streets.**

**A. Location and Alignment.**

- (1) All streets in the subdivision shall be designed and located so they will provide safe vehicular travel.
- (2) If adjoining property is not subdivided, proper provision shall be made for extending streets to the adjoining property, except in the case of Minor Rural Lane Subdivisions which shall not be extended.
- (3) Cross roads shall generally provide for block lengths between streets at intervals between 600 and 1,200 feet, depending on lot sizes and overall density of the subdivision.
- (4) The centerline of the paved surface shall coincide as closely as possible with the centerline of the right of way. In no case shall either edge of the paved surface be closer than 6 feet to the edge of the right of way.
- (5) Reserve strips prohibiting access to streets or adjoining property shall not be permitted except where, in the opinion of the Board, such strips shall be in the public interest.
- (6) All streets shall intersect so that, for a distance of at least 100 feet, the street is approximately at right angles to the street it intersects. No street shall intersect any other street at less than 60°.
- (7) The edge of the pavement or curb line shall be cut back to provide for a radius at intersections as specified in Table 3.2. Where the street intersection is sharper than 90°, the Board may require greater radii.
- (8) Property lines at street intersections shall be rounded and set back at least ten feet from the paved radius.
- (9) The intersection of streets shall have a 20' x 20' sight triangle within which there shall be no significant visual obstruction such as a wall, hedge, building, or steep topography that would obstruct a clear view of approaching vehicles.
- (10) Cross (four-way) street intersections shall be avoided wherever possible, with the exception of collector street crossings. Centerline offsets between intersecting streets shall be at least 100 feet unless it is a four way intersection.

**B. Street names and Lot Number.**

- (1) All proposed streets shown on the preliminary plan shall have their names written in pencil. The streets will have names and not be numbered or lettered (such as 1st, first or A Street).
- (2) Proposed street names shall be substantially different so as not to be confused in sound or spelling with present names in the Town of Lee. Streets that join or are in alignment with streets of an abutting or neighboring property shall bear the same name.
- (3) Proposed names of streets shall be reviewed by the E911 coordinator.
- (4) Proposed street address numbers shall be shown for each lot after assignment by the E911 coordinator.



C. Width of streets.

- (1) Right of Way. Streets shall have the minimum right-of-way widths for the specified street type in Table 3.2.
- (2) Traveled Way. The minimum paved width of each type of street shall be as listed in Table 3.2 and the typical cross section in Appendix B.

D. Grade.

- (1) Centerline grades of all streets shall generally conform to the terrain and shall not be less than 0.5% (1% preferred) nor more than 10%. Refer to Table 3.2 for maximum grades for specific street type.
- (2) Streets shall have a combination of horizontal and vertical alignments designed to avoid or minimize excessively deep cuts or fills. Excessively deep cuts or fills are defined as being an average of six feet deep of either cut or fill or more for any road segment length of one hundred feet or more.
- (3) Where unusual topographic conditions exist, the Board may permit grades steeper or cuts and fills deeper than indicated above, but in no case shall slopes be greater than 12% on a Rural Lane or 7.5% on other streets.

E. Horizontal Alignment.

- (1) The minimum radius of centerline curvature for all streets shall be 100 feet. Refer to Table 3.2 for specifics of minimum centerline radius for each street type.
- (2) A minimum fifty-foot tangent shall be introduced between reverse curves on any street with a design speed greater than 20 mph.
- (3) Horizontal sight distance shall be provided at intersections and along curves according to current AASHTO standards for the applicable design speed.
- (4) Streets shall be continuous and in alignment with existing streets as far as is practicable.

F. Vertical Alignment.

- (1) Vertical Curves. All changes in grade exceeding 1% shall be connected by vertical curves of sufficient length so that clear visibility shall be provided for a safe distance, as follows:
  - (a) Minimum required sight distance (expressed as "K" value) for sag vertical curves and crest vertical curves shall be calculated for the street's design speed and average daily traffic in accordance with the applicable current standards published by AASHTO.
  - (b) Where applicable, the Rural Low Volume Road Standards may be used.
  - (c) The vertical curve data shall be shown on the profile for each vertical curve, including difference between incoming and outgoing grades in percent ("AD"), length of vertical curve, and ratio between "AD" and length, referred to as "K" value.
- (2) Intersection leveling area. The grade of a street shall not exceed 3% for at least 50 feet from the paved edge of an intersecting street, in order to provide a level area for traffic safety.

G. Dead-end streets.

- (1) Through Streets. Streets in all but the smallest subdivisions (Average Daily Traffic less than 100) or as permitted below, shall be connected as through streets, either to town streets, or other subdivision roads already existing or proposed for construction in near the future.
- (2) Dead-end Street Alternatives. Where the applicant demonstrates to the satisfaction of the Board that the frontage, configuration, topography or soils of the property preclude the feasibility of the street

to connect through to two different streets or to a substantially remote section of the same street, the applicant may propose alternative road designs to provide two means of access and egress, including by emergency vehicles. Such alternative means might include:

- (a) A divided street entrance with a vegetated median strip of sufficient width to provide two separate travel lanes; or
  - (b) providing extra width of pavement or shoulders; or
  - (c) another method acceptable to the Planning Board.
- (3) Turnaround. A dead-end street ending in a cul-de-sac shall be provided at the closed end by a turnaround with an outside diameter of at least one hundred feet (100') and a minimum property line diameter of at least one hundred twenty feet (120'). Turnarounds may be larger than specified above and a landscape island may be allowed in the center of the turnaround, provided the following conditions are met:
- (a) Any proposed landscaped island in the center of the turnaround shall have a minimum diameter of at least 100 feet, and
  - (b) the traveled way shall continue around the outside of the island at the full width, and
  - (c) the property line diameter shall be at least 10 feet but no more than 25 feet greater than the outside edge of pavement.,
- (4) Continuation to adjoining property. Except as provided below, all dead-end streets, including streets with a divided entrance, shall have a right of way or easement with a right of way at least 50 feet in width reserved at the end to allow future extension or continuation of the street and/or utilities to adjoining unsubdivided property. A Rural Minor Lane Subdivision with a private subdivision road shall not have any extension or continuation.

- H. Temporary Turnaround. If the subdivision road is proposed to be constructed in phases, the Board may allow the construction of a temporary cul-de-sac provided at the closed end with a circular turnaround having an outside diameter of 100 feet and a property line diameter of at least 120 feet. Where the temporary dead-end street extends more than one lot beyond an intersection, there shall be constructed as part of the roadway a temporary turnaround located directly adjacent to the boundary of the section of subdivision road being constructed. The temporary turnaround shall be removed and the turnaround easement discontinued when the road is extended.

#### **§ 241-12. Open spaces.**

Before approval of a definitive plan, the Board may also require the plan to show a park or parks suitably located for playground or recreation purposes or for providing light and air. The parks shall not be unreasonable in area in relation to the land being subdivided and to the prospective uses of such land. The Board, by appropriate endorsement on the plan, may require that no building be erected upon such a park or parks for a period of not more than three years without its approval.

#### **§ 241-13. Protection of natural features.**

Developer shall design the subdivision with due regard for protection of natural features and avoidance of sensitive areas, such as large trees, watercourses, wetlands, floodplains, scenic vistas, trees and walls along designated scenic roads, historic spots and similar community assets, which if preserved will add attractiveness and value to the subdivision and the community. The developer shall make the necessary effort to adapt the subdivision to the site to minimize avoidable impacts on the property, such as excessive cutting and filling operations.

**ARTICLE IV**  
**Construction Standards**

**§ 241-14. General Construction Standards.**

- A. All construction materials and methods of construction shall comply with:
- (1) all applicable requirements of these Subdivision Regulations except any portions specifically waived by the Board;
  - (2) typical cross sections in Appendix B for the type(s) of street(s) in the subdivision;
  - (3) applicable portions of the Commonwealth of Massachusetts Highway Department Standard Specifications for Highways and Bridges, latest edition in effect at the time of submission of the Definitive Plan (or Preliminary Plan where applicable), referred to hereafter as MHD Standard Specifications; and
  - (4) current requirements of the Lee DPW regarding construction of roads and municipal utilities, in effect as of the date of submission of the plan for approval.
- B. Inspections.
- (1) The Planning Board will designate its representative for making periodic inspections of the construction work and for coordinating with the applicant's engineer. The Board's representative may be the Lee DPW Superintendent or his delegate, a Planning Board member, the Building Inspector, or a Consultant hired by the town for this purpose (paid for by the applicant as provided in § 241-5. D.).
  - (2) The applicant's engineer shall perform regular site visits at intervals appropriate to the stage of construction to review the construction work for compliance with the approved plans.
  - (3) Applicant's engineer shall meet on site with the Planning Board's designated representative, and, where applicable with the Lee DPW and other applicable town departments, to conduct Milestone Inspections of the construction of required improvements.
  - (4) A Milestone Inspection shall be performed with the Board's representative upon completion of each of the following milestones applicable to the approved plans, and prior to the Board granting partial or final release of any Performance Guarantee:
    - (a) Completion of clearing, grubbing and stripping;
    - (b) Completion of subgrade preparation;
    - (c) Installation of storm drainage system;
    - (d) Installation of water and sewerage systems, as applicable;
    - (e) Completion of gravel base including installation of conduits for underground wiring under and along roadway;
    - (f) Base Course Paving, and Curbing as applicable;
    - (g) Final Paving, sidewalks, and grassed shoulders, as applicable;
    - (h) Final Completion including established vegetation, street trees, street signs, monuments, and other applicable required improvements.
  - (5) Applicant's engineer shall prepare written records of the milestone inspections for endorsement by the town inspection agencies and submit a copy to the Board as each milestone is reached. Work on subsequent portions of the construction shall not proceed until each milestone has been completed to the satisfaction of the Board, and where applicable, the Lee DPW.

- (6) Applicant's Engineer shall prepare and submit to the Board and the Lee DPW a reproducible copy of a record plan showing tie measurements to all sewer service stubs, water service connections, underground electric and communication conduits, underground storm drain facilities, and other underground utilities. The Record Plan shall be filed with the Board and the Lee DPW before the Performance Guarantee will be released.
- (7) The Performance Guarantee covering the improvements outlined in these regulations shall not be released in final by the Board until the applicant submits a Final Certificate of Completion, with signoffs by the Lee DPW and other applicable town departments (Board of Health, Conservation Commission, etc.) Upon final completion of the improvements, applicant's engineer shall submit an Engineer's Certificate of Final Completion (Form F-2) to the Board prior to the final release of the Performance Guarantee.

**§ 241-15. Street clearing and grading.**

A. Site Preparation; Erosion and Sedimentation Controls.

- (1) No clearing or site preparation work shall be performed before the subdivision is approved and the Performance Guarantee is in effect. Any premature work may result in the Board requiring restoration, additional plantings, or action to rescind approval.
- (2) Erosion and sedimentation control measures shall be designed and installed prior to beginning clearing or earthwork, and shall be maintained throughout the construction.

B. Clearing and Stripping.

- (1) Except for any trees shown on the plans as intended for preservation, the entire right of way of the street(s) shall be cleared of all stumps, brush, roots, boulders and similar material. Topsoil shall be stripped and stockpiled for reuse on site. Topsoil shall not be removed from the site without prior authorization and issuance of any required earth removal permits.
- (2) The site shall be cleared only to the extent necessary for actual construction. Trees, shrubs, ground cover, and vegetative filter strips beyond the limits of construction should be preserved wherever possible, and the clearing limits shall be clearly marked in the field for protection against damage during construction.

C. Subgrade preparation. The full length and width of the roadway shall be excavated or filled, as necessary, to the subgrade depth required for the specific type of street. Any unsuitable soils or conditions below the specified subgrade depth (such as clay, peat, sand pockets, stones over six inches in diameter, rubble, construction debris, or any other material detrimental to the subgrade) shall be removed and replaced with suitable well-compacted material. Where appropriate, roadway stabilization fabric, rock fill, subdrains, or other subgrade stabilization measures shall be designed by the applicant's engineer and approved by the Board's representative to correct specific conditions.

**§ 241-16. Roadways.**

- A. Roadways shall be constructed for the full width and length of all streets within the subdivision shown on the plan. Road stubs intended for future access to adjacent properties, at the discretion of the Board, need not be constructed at the time, except that the first 15 feet of the stub shall have street grading and gravel.
- B. Gravel Base. The gravel borrow and processed gravel borrow for the sub-base and base of the street shall conform to the requirements of Subsection 405 of the MHD Standard Specifications. Except, however, gravel borrow shall contain no stone having any dimensions greater than four inches. A sieve analysis and Proctor test shall be obtained for each type of gravel to be used and the test results submitted to the Board and Lee DPW to demonstrate compliance with the material requirements.

- C. Gravel sub-base and base shall be constructed as shown on the typical cross sections plans and in accordance with the applicable MHD Standard Specifications. Gravel for roadways shall be spread uniformly, with the larger stones at the bottom but no horizontal segregation of large or fine particles. The gravel shall be spread and rolled in layers no more than six inches thick to achieve the full compacted depth of gravel borrow sub-base and processed gravel base required for the type of street. Any stones in the sub-base layer larger than four inches, and in the processed gravel base layer larger than one and a half (1½) inches shall be removed before layers are rolled. Any unsatisfactory gravel shall be removed and replaced by the subdivider.
- D. Grading and Compacting. Fine grading shall be performed by a grader. Rolling shall be done with a self-propelled vibratory roller weighing not less than 10 tons and shall continue until a firm, even surface true to line and grade with proper crown and surface drainage is obtained. Applicant shall obtain compaction tests of the gravel at intervals not to exceed 300 feet and submit copies to the Board and Lee DPW to demonstrate compliance with the Standard Specifications.
- E. Drainage and Utilities. All storm drains, water pipes and other utilities and infrastructure shall be properly installed and tested as specified below, and inspected by the applicant's engineer and Lee DPW Superintendent prior to the completion of the gravel base and prior to paving. A written record of the inspection and test results shall be submitted to the Board and the Lee DPW.
- F. Paving. The street shall be paved for its full width compliance with applicable portions of the MHD Standard Specifications, Lee DPW Construction Standards, as shown on the typical cross sections in Appendix B, and as shown on the approved construction plans.
  - (1) Bituminous concrete mixture shall be applied by a paving machine, and rolled to the required compacted thickness, line, grade, crown and drainage.
  - (2) Base or Binder Course Paving. The initial course(s) of pavement shall take place only after satisfactory installation of the utilities and final grading and compaction of the gravel base.
  - (3) Top Course Paving shall generally be deferred for several months, preferably through one winter season, to allow for any settlement or defects to be corrected.
  - (4) Prior to applying the top course paving, all structures in the roadway such as manhole covers, catch basin frame, or water gate boxes, shall be raised to finished grade and surrounded by concrete.
  - (5) The underlying pavement shall be prepared by sweeping, applying a leveling course to correct any settled areas (if applicable), and applying a tack coat prior to applying the top course paving.

**§ 241-17. Curbing.**

- A. Curbing shall be installed on both sides of streets where required for the type of street specified in Table 3.2 and shown on the figures in Appendix B. Curbing shall also be installed where required on steep sections of roads to control storm drainage runoff. In general, curbing is required on streets in major residential subdivisions, and in all non-residential subdivisions.
- B. Curbing materials and methods of construction shall conform to the applicable portions of the MHD Standard Specifications for the specified type of curb or berm.
- C. Where curb is stopped for driveway entrances, etc., the ends shall be rounded off or tapered down in a neat, workmanlike manner.
- D. Curbing shall be installed before top course paving is applied.

**§ 241-18. Sidewalks, Bikeways and Driveways.**

- A. Sidewalks shall be constructed on one or both sides of streets where required in Table 3.2, or where directed by the Board.

- B. A bike lane shall be provided along the street or in a separate bikeway where, in the opinion of the Board, the volume of vehicular traffic and bike traffic warrants such construction.
- C. Sidewalks shall be constructed of bituminous concrete or cement concrete and shall have a well compacted gravel base. Sidewalks shall have a slip-resistant surface and shall have a cross slope of at least one percent (1%) and a maximum of two percent (2%). Sidewalk construction shall conform to the applicable sections of the MHD Standard Specifications and Architectural Access Board regulations.
- D. Handicap Access. Where sidewalks are constructed, sidewalk ramps shall be provided at each intersection and across all driveway openings to form a continuous accessible route along the sidewalk. Sidewalks and curb ramps shall be designed to comply with all applicable slopes, transitions, dimensions, and materials as specified in the Rules and Regulations of the Mass. Architectural Access Board in effect at the time of application.
- E. Driveway Aprons.
  - (1) All driveways shall be paved for at least ten feet from the completed road surface with at least three inches of bituminous concrete pavement or at least 6" of concrete pavement, over at least 12" of compacted gravel.
  - (2) Driveway slopes steeper than three percent (3%) shall end at the street right of way. The portion of a driveway within the street right of way shall be graded to be compatible with the line and grade of the sidewalk, accessible sidewalk ramp, and/or shoulder.
  - (3) Drainage from a driveway shall be controlled on the lot and shall not be allowed to drain directly onto the paved surface of the road.

**§ 241-19. Sanitary Sewer System.**

- A. General. Sanitary sewage disposal system(s) shall be provided as necessary to provide all lots in the subdivision with adequate sewage disposal.
- B. Sewage Collection System.
  - (1) Gravity Sewer System. Unless otherwise approved by the Board and the Lee DPW, all lots in the subdivision shall be connected to the municipal sewage collection and treatment system. The entire sewer system shall be gravity flow, including house services to the sewer main. (This does not preclude use of a sewage ejector inside an individual home to serve a small portion of the house below the grade of the gravity service connection, in accordance with the State Plumbing Code.)
  - (2) Alternative Sewage Collection Systems. If the Board determines that a gravity sewer system is not feasible or desirable due to local conditions such as topography, adverse soils or shallow bedrock, the Board may approve an alternative sewerage system only with the written approval of the Lee DPW. Such alternative systems may include but are not limited to the following:
    - (a) Sewage Grinder Pumps for Individual House Services located lower than the gravity sewer main.
    - (b) Low Pressure Sewer System, consisting of a common sewer force main with individual grinder pumps for each home site.
    - (c) Municipal Sewage Pump Station and Force Main, consisting of gravity collector sewers to a municipal sewage pump station, discharging through a force main to the municipal sewer system. All components of the sewage pump station, force main, standby power, and appurtenances shall be designed, constructed and operated in accordance with the standards for a municipal pump system approved by the Lee DPW and Mass. Department of Environmental Protection (Mass. DEP). The pump station and appurtenances must be designed and constructed with capacity for maximum flow from all homes in the subdivision plus an allowance for future

potential development in the drainage area contributing to the pump station as determined in consultation with the Lee DPW.

- (3) On-site Sewage Disposal Systems. Where existing municipal sewer mains are not located within five hundred (500) feet from the subdivision measured along the roadway, or the existing sewer line is not reasonably accessible due to topography, soil conditions, or other site constraints, the Board may approve the subdivision plan without a connection to the municipal sanitary sewerage system provided that:
  - (a) No lot shall be built upon without the provision of on-lot sewage disposal facilities specifically approved by the Board of Health on an individual lot basis.
  - (b) The Board of Health has voted to approve the subdivision and the lots within the subdivision without the installation of public sanitary sewers.
  - (c) The Planning Board will require the installation of dry sewer lines serving every lot in the subdivision, unless the Lee DPW states in writing that municipal sewers are not planned to be installed within five hundred (500) feet of the subdivision within the five years following the application for approval of the definitive plan. Installation of dry sewer lines and manholes, if required, shall be made in conformity with Lee DPW Standard Specifications.
- (4) Alternative Sewage Disposal Systems. The Board and Board of Health may approve the subdivision plan with an alternative sewage disposal system, upon demonstration that such a system is beneficial to the town's interest in protecting public health, safety, and the environment. Such an alternative system may include but is not limited to the following:
  - (a) Private Community Septic System, consisting of a combination of collector sewers (gravity or pressure sewers) that flow to a privately owned and operated septic system, with or without a treatment system, and having capacity for all homes in the subdivision, subject to approval by the Board of Health and Mass. DEP.
  - (b) Other Innovative or Alternative Private Sewerage Systems, subject to approval by the Board of Health and Mass. DEP.
  - (c) Any private sewerage system shall only be approved by the Board if the developer submits documentation to demonstrate to the satisfaction of the Board, the financial, legal, and operational structure of the private sewerage system. The developer shall demonstrate that the Town of Lee will never be held responsible for any costs associated with the private system.

C. Design and Construction of Municipal Sewer Collection System.

- (1) All components of the sewer collection system shall be designed and constructed to comply with the Construction Standards of the Lee DPW in effect at the time of application, and all applicable requirements of state and federal law.
- (2) Location. Sewer lines shall generally be installed within the center portion of the traveled way, as shown on Figure B-7 in Appendix B. Sewer mains shall be located at least ten feet from water mains, except where crossings are required, which shall occur as close to right angles as possible.
- (3) Sewer Manholes. Sewer Manholes shall be located at every point of change in vertical or horizontal alignment and at intervals not to exceed 300 feet in a straight line run. Sewer Manholes shall be precast concrete, with watertight connectors cast in, and ductile iron frame and cover. Manhole steps shall be cast in to the sewer manhole.
- (4) Sewer Mains. Sewer pipes shall be installed in strict compliance with the Lee DPW Construction Standards and the contractor shall follow the explicit laying instructions of the pipe manufacturer. All pipes shall be laid accurately to line and grade as shown on the approved construction plans. Trenches shall be kept water free and as dry as possible during bedding, laying and jointing, and backfilling.
- (5) Sewer line stubs for building service connections. Connecting stubs from the sewer main shall extend to the street right of way line of each lot shown on the subdivision plan. Each stub shall be connected to the sewer main with a watertight tee-wye connection angled in the direction of the

flow. The service connection pipe shall connect to the main at or above the crown of the sewer main, and shall slope from the right of way to the sewer at a minimum slope of one percent (1%), preferred slope of two percent (2%). Prior to the occupancy of a residence in the subdivision, the contractor will tie in the stub to the residence so that it will be connected to the town system.

- (6) Testing. Applicant's Engineer shall observe testing of the completed sewer system for water-tightness, including sewer lines, manholes and service stubs. Sewer lines shall also be visually inspected to assure that lines are true to line and grade and have not become deformed or displaced. Records of all tests shall be submitted to the Board and the Lee DPW.
- (7) Record Plan. Applicant's Engineer shall prepare a record plan showing invert elevations of the sewer system and tie measurements to all stub locations and submit it to the Board before the Performance Guarantee is released.

**§ 241-20. Water Supply System.**

- A. Municipal Water Supply and Fire Protection. Wherever feasible, the water supply system for the subdivision shall be connected to the municipal water supply system, for both drinking water and for fire protection. Applicant shall consult with the Lee DPW and Fire Chief regarding adequacy of water supply, static and dynamic pressure at house sites, fire flows, pressure and volume, and shall provide this information to the Board.
- B. Non-municipal Water Supply and Fire Protection. If water supply and/or fire protection from the municipal water supply system is not feasible due to conditions beyond the control of the developer, the Board may approve the subdivision provided:
  - (1) that each building lot will be served by an on-site private well meeting the current requirements of the Lee Board of Health, or by connection to a non-municipal public water supply approved by Mass. DEP; and
  - (2) that the developer demonstrates that adequate fire protection can be provided to the lots in the subdivision, considering:
    - (a) the distance to the nearest hydrants or other source of water for fire protection, such as a fire pond, dry hydrant, or on-site cisterns;
    - (b) the distance, condition, width and grades of roads between the fire station and houses within the subdivision; and
    - (c) density and type of development.
- C. Looped Water Mains. Water mains shall normally be designed to be looped wherever practical. Permanent dead-end water mains shall only be allowed with the written approval of the Lee DPW. Short dead-end mains may be allowed for short cul-de-sacs, and temporary dead-end mains may be permitted where future extensions or looping of mains through adjacent development is anticipated. Valving, stubs, and easements for such future extensions shall be provided where required.
- D. Design and Construction of Municipal Water Supply Distribution and Fire Protection System.
  - (1) All components of the water distribution and fire protection system within the subdivision shall be designed and constructed to comply with the Construction Standards of the Lee DPW in effect at the time of application, and all applicable requirements of state and federal law.
  - (2) Location. Water lines shall generally be installed within the center portion of the traveled way, as shown on Figure B-7 in Appendix B. Water mains shall be located at least ten feet from sewer mains, except where crossings are required, which shall occur as close to right angles as possible.



- (3) Water Valves. Water valves shall be installed on the water main on all three legs of each main line tee in the water main (not required for hydrant branch valves). Line valves shall be installed at maximum intervals of 500 feet in commercial districts or 800 feet in residential areas.
- (4) Water pipe shall have a minimum cover of six feet over the top of the pipe to finished grade in paved areas, and five feet minimum cover in unpaved areas.
- (5) All materials, excavation, bedding, pipe laying and joining, backfilling, testing for leakage, pressure, and disinfection shall be as specified in the Lee DPW Construction Standards.
- (6) All bends, tees and hydrants shall have proper thrust restraints for the maximum working pressure in the system, or a minimum of 200 psi, whichever is greater.
- (7) Hydrants shall be installed at locations approved by the Lee Fire Chief.
  - (a) A hydrant shall be located at or near the beginning of each street in the subdivision, at each intersecting street, and at intervals of between 350 and 600 feet depending on the area served.
  - (b) A hydrant shall be placed at the end of all streets, whether temporary or permanent, to allow for flushing.
  - (c) In single family residential subdivisions, hydrants shall be located so that each house site will be within a five hundred (500) foot radius from a hydrant, and the hose laying length from the hydrant along the road and driveway to the house site does not exceed 750 feet.
- (8) Provisions shall be made to exhaust air from the water main pipe at all high points in the water main.
- (9) House service connections of a size and material approved by the Lee DPW shall be installed from the main in the street to the front lot line of each lot shown on the subdivision plan. Curb stops shall be brought to finished grade and marked by a wooden stake for future connection.
- (10) Plans shall include measures to conform to the town's requirements for water meters, pressure reducing valves, backflow preventers, or other appurtenances that may be required at each building site.
- (11) A record plan showing tie measurements to all valves, tees, and water service connections shall be filed with the Lee DPW before the performance bond may be released.
- (12) Disinfection and Pressure Testing. The entire water system shall be properly disinfected, flushed and tested prior to being put in service. The water mains and hydrants shall be pressure-tested for leakage and also flow-tested under maximum available pressure. Test results shall be submitted to the Board and to the Lee DPW.

**§ 241-21. Stormwater Management System.**

- A. Basic Requirements. Storm drains, culverts, swales, stormwater detention basins, water quality structures, and related facilities shall be designed and constructed to permit the unimpeded flow of all natural watercourses, to ensure adequate drainage at all low points along streets, to control erosion and prevent sedimentation, to intercept stormwater runoff at intervals appropriate for the surface area and grade of the drainage area being served, to prevent flooding or overloading of downstream drainage facilities, and to control the rate and water quality of stormwater discharge from the site to be consistent with drainage conditions prior to development. The stormwater management system shall also comply with all applicable requirements of the Lee Zoning Bylaws, Floodplain District Regulations, Wetlands Protection Act (MGL Ch. 131 §40), and other local, state and federal laws and regulations in effect on the date of application.
- B. General Design Approach. Selection, design and construction of the most appropriate Stormwater Management System for the proposed subdivision will depend on a variety of site-specific factors, including the soils, slope and topography, drainage characteristics of the vicinity, upstream and

downstream drainage systems and potential future development, and the type and density of the proposed subdivision as described below:

- (1) Low-density subdivisions are those with average lot sizes of one acre or more, and lot disturbance areas of less than twenty percent (20%) (e.g. at least 80% of the lot will remain in its natural undisturbed condition). Low-density subdivisions often use an "Open" drainage system, with roadway drainage provided by roadside swales or sheet flow and dispersing the drainage outlets into cross culverts into natural watercourses. Stormwater detention and water quality may be accomplished by vegetated swales, temporary ponded areas, rain gardens, and other "best management practices" suitable for rural areas.
- (2) Higher-density residential developments include subdivisions, apartment complexes, and non-residential developments with average lot sizes less than one acre, and/or average lot disturbance areas of greater than twenty percent regardless of lot sizes. These developments will generally require a "Closed" drainage system to collect runoff due to the relatively large percentage of impervious surfaces (roofs, paved surfaces, etc.). A closed drainage system includes catch basins with sumps and oil/grease hoods, drainage manholes, and drainage pipes that collect the runoff and carry it to one or more stormwater detention, infiltration, and/or water quality basins, before being discharged. Closed drainage systems should include provisions for foundation drains and cellar drains from building sites.
- (3) Open and Closed Drainage systems may be combined in appropriate conditions.

C. Design Basis.

- (1) The applicant's engineer shall design the drainage system to achieve the Basic Requirements stated above, and to control runoff so that there is no increase in the peak rate of stormwater runoff from the fully developed subdivision compared to its pre-development condition, for the 2 year, 10 year, and 25 year design storms.
- (2) The development shall also be analyzed for the 100 year storm to demonstrate that there will not be an increase in flooding as a result of the development.
- (3) All pipes, culverts, swales and other components of the storm drainage system shall be designed with capacity to handle the 25 year storm without surcharging. The design shall also provide for surface overflow conditions for excess runoff from more severe storms, or in case of blockage of the closed drainage system. Where necessary, limited-duration ponding of excess runoff may be allowed up to depths of six inches in streets and up to twelve inches on lots, provided that a reasonable area for a building site will remain un-flooded on each lot under all storm conditions up to and including the 100 year design storm.

D. Drainage Calculations.

- (1) Hydrologic analyses shall be performed using a computerized hydrologic modeling program based on TR-20 as promulgated by USDA Natural Resources Conservation Service. Computations shall clearly and accurately analyze the soil conditions, vegetative cover, slopes, and other hydrologic conditions for the pre-development and post-development conditions of the entire subdivision.
- (2) Drainage calculations for sizing pipes may use other generally accepted engineering formulas and methods.
- (3) Applicant's engineer shall analyze the subdivision area including any upstream drainage areas contributing to stormwater runoff from the site. Analysis and drainage design shall assume that tributary areas are or will be fully developed as allowed by current zoning.
- (4) Drainage analysis shall list all assumptions used for the drainage calculations, including but not limited to:

- (a) Assumed areas of new impervious surfaces on future house sites, such as roofs, driveways, parking, walkways, tennis courts, etc;
  - (b) Assumed areas of change in vegetative cover, such as from wooded to lawn;
  - (c) Other assumptions used in comparing the pre-development and post-development drainage conditions.
- (5) The Applicant's drainage analysis shall demonstrate to the satisfaction of the Board that the stormwater runoff from the site under post-development conditions, including assumed building site development, will not increase the peak rate of runoff for the 2 year, 10 year, and 25 year design storms, and there will be no increase in downstream flooding during the 100 year storm, compared to pre-development conditions.

E. Design and Construction of Storm Drainage System.

- (1) All components of the storm drainage system, including stormwater management measures, within the subdivision shall be constructed in accordance with the current edition of the Town of Lee Construction Standards and as specified herein.
- (2) Catch Basins.
  - (a) Catch basins (or, where applicable in an open drainage system, cross culverts or paved waterways) shall be constructed at all street intersections, at all sags, and at intervals of not more than 300 feet between high points along sloping streets.
  - (b) Each Catch Basin shall have a sump at least two deep below the invert of the lowest drain pipe.
  - (c) Where required by the Lee DPW and/or Conservation Commission, catch basins shall be equipped with an oil and grease hood over the outlet drain for water quality mitigation.
  - (d) Catch basin inlet grates, throats, and/or curb inlets shall be designed with inlet capacity for the twenty-five year storm with no more than six inches of ponding.
  - (e) Catch basin inlets shall be designed with due regard to safety (pedestrians, bikes, vehicles, etc). Inlet openings shall not exceed six inches in the smallest dimension (length or height) or shall be equipped with safety bars to prevent large objects from being washed into the catch basin.
  - (f) Drains at low points of roads shall be designed to have an emergency surface overflow route reserved in case the closed drainage system is overloaded by an extreme storm event, or the inlet becomes clogged. A drainage easement with no occupiable buildings shall be reserved along this emergency overflow route.
- (3) Drain Manholes. Any portion of a drain system connecting more than two catch basins or drain inlets shall be provided with a drain manhole at the junction point. All drain pipes shall be laid straight in both line and grade between manholes.
- (4) Drain Pipes. Minimum pipe size in the closed drainage system shall be 12 inches. Larger pipes may be required to handle the 25 year design storm for the drainage area.
- (5) Cross Culverts. Minimum pipe size for cross culverts or driveway culverts shall be 18 inches, with a minimum slope of at least two percent (2%).
- (6) Pipe Ends. The outlet ends of all drain pipes shall be equipped with scour protection and velocity reducing measures, such as one or more of the following measures: flared end sections, stone apron, stilling basin, etc.
- (7) Subdrains. Subdrains shall be installed on one or both sides of the street where subsurface drainage conditions or soil conditions are adverse.
- (8) Footing Drains. In higher-density developments, all lots upgradient of the road drainage system shall be provided with a storm drain service pipe connected to the storm drain system, for footing drains and/or sump pump connections. Pipe size shall be a minimum of four inches. (In no case shall footing drains or sump pumps be allowed to connect to the Sanitary Sewer System.)

- (9) Stormwater Management. The Storm Drainage System shall include measures necessary to demonstrate to the satisfaction of the Board that the stormwater runoff and water quality impacts from the development have been properly controlled, dispersed, and/or otherwise mitigated in accordance with these regulations and all current state and federal regulations.
- (10) Stormwater Basins (Detention Basins and/or Water Quality Basins). Where employed, Stormwater Basins shall be designed and constructed in accordance with good engineering and construction practice and shall comply with the following criteria where applicable:
- (a) Depth and grading. Maximum depth of water held in the basin shall not exceed five feet above bed elevation. The slope of detention basin walls shall not exceed one foot vertical in three feet horizontal.
  - (b) Emergency Spillway and Embankment. An emergency spillway shall be constructed at the highest projected water surface (generally the 100 year storm overflow elevation). The top elevation of the settled embankment shall be constructed with a freeboard height not less than one foot above the emergency spillway elevation.
  - (c) Groundwater. Detention facilities (either "wet" or "dry" basins) shall be located to avoid affecting existing surface waters and wetlands on or near the site. Excavation for detention facilities shall be designed to be the maximum practical distance above seasonal high groundwater elevation. In "wet" basins, detention storage may only be calculated above the elevation of the seasonal high groundwater, unless engineering measures are shown to lower or cut it off. In "dry" basins or infiltration basins, the bottom of the basin shall be a minimum of two feet above the seasonal high groundwater elevation. The determination of estimated seasonal high groundwater shall be made by the applicant's engineer using established methods of soil evaluation.
  - (d) Base Elevation. The base of the detention basin must be entirely below the existing grade, not constructed on fill material.
  - (e) Inflow. Inflow pipe invert shall be high enough that there will not be substantial backwater in the pipe with the detention basin at maximum depth. The downstream end of the inflow pipe shall be suitably protected against scour and shall protect the bed and sides of the basin.
  - (f) Outflow. There shall be one or more outlet structures with a weir or graduated outlets or orifices designed to detain stormwater for each of the required design storms. Outlets shall be equipped with a trash rack. The basin shall be designed to discharge approximately 90% of the detained stormwater within approximately 24 hours (not including any permanent pond area within the basin). The main outlet pipe shall be not less than six inches in diameter. All outlet pipes and spillways shall discharge onto an erosion-resistant surface designed for the maximum outflow. The receiving area downstream of the outlet(s) shall have sufficient capacity and condition to accept the outflow without overload, erosion or scour.
  - (g) Planting. The basin side slopes and bottom (of dry basins) shall be provided with at least four inches compacted depth of loam, and seeded with grassy vegetation.
  - (h) Protection. A four-foot fence or wall shall be constructed around the basin with an eight-foot wide gate for access (may be double four-foot leaf), with lock, and a key shall be provided to the Town of Lee. However, if the detention facility has slopes not exceeding one foot vertical to four feet horizontal and a maximum water depth of not more than 2.5 feet, an alternative barrier, such as a hedge, or awareness fence such as split rail, may be allowed.
  - (i) Maintenance. Maintenance of stormwater basins shall be assured at no expense to the town until and unless the Town accepts the stormwater basin.
  - (j) Acceptance Requirements. No stormwater basin will be considered for acceptance unless it has been designed, constructed and maintained in strict compliance with these regulations and all other current applicable regulations, under the direction of a Professional Engineer (Civil) experienced in this type of installation.

**§ 241-22. Other Utilities.**

**A. Utilities in general.**

- (1) All utilities shall be installed in the proposed ways before the gravelling of the roadway is completed.
- (2) Increased Pipe Sizes. Where, in the opinion of the Board or the Lee DPW, a water pipe, storm drain pipe or sanitary sewer line should be of larger diameter than specified in the regulations because of adjacent existing or proposed development not owned by the subdivider, the difference in cost of the pipe size required for the development and the cost of the pipe size required for ultimate development of adjacent areas upon which the adequacy of this system depends may be requested by the applicant from the town. If funds are not available, the applicant may proceed, assuming the entire cost of the larger pipe size, or wait until such time as a Town Meeting may approve payment to the subdivider of the extra cost.
- (3) Public Service Utilities. All service utilities (electric, gas, telephone, television cable, etc.) shall be installed underground. Stubs from each utility must be installed to the property line to serve each lot. The Board, at its discretion, may allow empty conduits with pull strings for these connections to be installed in the roadway prior to surfacing, to allow for future house connections without roadway damage. A least one spare conduit shall be installed.
- (4) No utility poles, above-ground transformers or utility pedestals, signs or similar obstructions shall be located less than three feet from the edge of the roadway.

**B. Street Lighting.**

- (1) Street lighting shall be provided where the Board determines it is required for safety of vehicles or pedestrians. In general, street lighting will be required in higher density areas in conjunction with sidewalks, and may also be required at intersections, cul-de-sacs, or hazardous road conditions.
- (2) Street lighting fixtures, unless otherwise approved, shall be shielded luminaires with internal optics, partial or full cutoffs, and mounted on poles no higher than twenty feet.
- (3) Applicants are encouraged to consider alternative low-level lighting methods that minimize glare, sky-glow, and light trespass, and that provide an attractive streetscape. Lower-level lighting fixtures along the roadway but located on individual lots may be approved as an alternative to streetlights where appropriate.

**C. Easements.**

- (1) Utility Easements. Easements for utilities shall be provided where necessary and shall be at least 20 feet wide, centered on the utility. The easement shall include provisions for access for construction and maintenance work.
- (2) Location of Easements. The subdivision shall be so engineered to minimize the necessity for drainage and/or utility easements across lots. Every effort shall be made to confine storm drain lines and/or other utilities within the existing or proposed street right of way. However, easements for utilities across lots or centered on the rear or side lot lines shall be provided where necessary.
- (3) Water and/or Sewer Easements. Unless otherwise decided by the Board and Lee DPW, water and/or sewer mains and appurtenances shall be deeded to the Town of Lee and become part of the town's infrastructure. This does not include individual water and/or sewer service connections which will remain privately owned and maintained.
- (4) Water and Sewer Easements in Private Streets. In the case of a private subdivision, utility easements shall be deeded to the Town for all water and/or sewer mains including those within the private

street right of way, unless the Board and Lee DPW determine the mains should not be owned and maintained by the town. Such easements shall stipulate that the town's responsibility for maintenance and repair of its utilities is limited to restoring the gravel base of any road surfaces. Replacement of pavement, curbs or sidewalks in a private subdivision will remain the responsibility of the subdivider or successor organization such as a Homeowners' Association.

- (5) **Drainage Easements.** A drainage easements shall be provided where a subdivision is traversed by a watercourse, drainage way, channel, or stream, or by a drainage pipe or stormwater management facility. The drainage easement or right of way shall have adequate width to substantially include the entire flowage area under conditions of a 100 year design storm, and shall include the right and easement to discharge onto and across downstream property.
- (6) **Off-site Easements.** Where off-site utilities or drainage improvements are required on other property beyond the limits of the subdivision, utility easements shall be obtained and submitted to the Board for review by Town Counsel.
- (7) **Slope easements.** Slope easements to provide for construction and maintenance of roadside slopes shall be provided where cut or fill slopes cannot be contained within the street right of way.

**§ 241-23. Monuments and Property Corner Markers.**

- A. Permanent monuments shall be installed along the street right of way at all street intersections, angle points, points of curvature or tangency, at straight line intervals not to exceed 1,200 feet, at the termination (whether temporary or permanent) of all streets shown on the definitive plan, at the corners and angles of the boundaries of any proposed open space or public areas within the subdivided tract, and at other points where, in the opinion of the Board, permanent monuments are needed.
- B. Property corner markers shall be installed at all corners of lots, parcels and common areas, and along straight property lines at intervals not to exceed five hundred feet.
- C. The accuracy of location of such monuments and property corner markers shall be certified, in writing, by a Commonwealth of Massachusetts registered land surveyor before release of the final performance guarantee of the street by the Board.
- D. Monuments shall be made with concrete, 3,000 pounds per square inch and shall measure six inches by six inches by five feet long. Each monument shall have a lead plug at least two inches long in the top and shall be so set that a one-inch brass escutcheon pin driven into the lead plug shall be the point of reference. Backfill material shall be carefully placed around the monument and thoroughly tamped. The top of such monument shall be set no more than six inches above the finished grade.
- E. Property corner markers may be any suitable marker installed in accordance with standard practice for land surveying.
- F. No monuments or property corner markers shall be installed until all construction that would destroy or disturb them is completed. All markers shall be installed so they do not create a trip hazard.

**§ 241-24. Street signs.**

- A. A Street sign shall be installed at the beginning of all new roads and at the intersection of all roads, whether existing or proposed, within a subdivision. At least one street sign shall be installed at each intersection identifying the streets in all directions.
- B. Street signs and posts shall conform to the current Lee DPW Construction Standards. Signs shall be installed behind the sidewalk line, where applicable, or set back at least 6 feet from the edge of the traveled way.

**§ 241-25. Grading, Planting and Street Trees.**

A. Shoulders:

- (1) Shoulders shall be provided on both sides of the roadway, free of obstructions other than trees or utilities approved by the board.
- (2) Required width shall be as indicated on the applicable cross section in Appendix B. Additional width shall be provided where needed for sight distance, snow storage, or other conditions.
- (3) Shoulders should generally slope at 2% toward the street drainage system where feasible.

B. Sideslopes.

- (1) The area in back of the sidewalks or required shoulders shall be sloped at a maximum slope of two feet horizontal to one foot vertical, or one foot horizontal to one foot vertical if it is stable bedrock, to a point where it meets original ground or finished grade of the adjacent lot.
- (2) The street right of way shall be widened where necessary to contain the sideslopes of roads, or slope easements shall be provided for this purpose.
- (3) Any proposed retaining structures must be located outside of the street right of way with provisions for private maintenance, unless otherwise approved by the Board and Lee DPW.
- (4) Additional slope stabilization measures shall be implemented where conditions such as poor soils, drainage, or steep slopes indicate that grass alone will not be adequate to provide a permanent stable slope.

C. Guiderail.

- (1) Any shoulder less than ten feet wide having a drop-off exceeding four feet in height with the top of slope beginning less than ten feet from the edge of the traveled way shall have sideslopes sloped at a maximum of four feet horizontal to 1 foot vertical, or shall be provided with a safety guiderail located at least three feet from the traveled edge.
- (2) Guiderail shall be designed and installed in accordance with the current Lee DPW standards.

D. Topsoil. Topsoil shall be placed to a depth of four inches after thorough compaction on all shoulders, side slopes and other grassed areas within the street right-of-way.

E. Seeding. Shoulders, landscape areas and side slopes shall be seeded according to good landscaping practice with fresh, clean, new crop grass seed.

F. Street Trees.

- (1) General. It is the Board's intent that streets created in a subdivision be lined with trees on both sides at intervals of no more than 50 feet. This may be accomplished by retaining existing healthy trees or by planting new trees.
- (2) Street Trees shall generally be located on the lots in a tree line easement outside the street right of way. (See Typical Cross Sections of Streets in Appendix B for Illustration.) However, existing individual specimen trees may be retained within the right of way where approved by the Board.
- (3) Street trees shall be planted on each side of every street in the subdivision where, in the opinion of the Board, existing woodlands or suitable individual trees are not retained.

- (a) Trees shall be nursery grown stock, with a caliper no less than one and one half inch (1 ½") measured one foot above the root collar.
  - (b) Species shall be selected to be disease-resistant, salt-tolerant and hardy for the proposed street condition. A mixture of several species of street trees is preferred. The proposed species shall be submitted to the Board for approval.
  - (c) Trees shall be spaced no more than 50 feet apart and shall be planted within the tree line easement unless otherwise directed by the Board.
  - (d) Planting season shall be March 15 to May 15 or from August 15 to October 15. Subdivider is responsible for watering and nurturing trees to maximize survival.
  - (e) Subdivider shall guarantee the success of the street trees and replace any trees that do not survive within one year after planting.
- (4) The subdivider shall consult with the Board prior to cutting of trees on the subdivision property. It is the opinion of the Board that existing trees should be cut only where necessary and not merely for convenience. If the Board determinates that needless cutting or land scarring has taken place during construction or prior to application for approval, the Board may require the subdivider to replace trees on lots and restore land as near as possible to its original condition. Clearing of the subdivision property prior to submitting an application for approval of a subdivision is strongly discouraged, and may be cause for the Board to require revegetation and restoration as part of its conditions of approval.

**§ 241-26. Cleanup.**

- A. Throughout the construction period, all work areas shall be kept in good stable condition, free from erosion, sedimentation, or undue accumulation of debris. Cleanup, stabilization, and temporary revegetation shall take place as soon as feasible and shall not be deferred until the end of the construction.
- B. Prior to applying for final inspection and release of the Performance Guarantee, the entire construction area shall be stabilized and permanent vegetation established, free from erosion or sedimentation, and cleaned up so as to leave a neat and orderly appearance free from debris and other objectionable materials. Silt fences and other sedimentation control measures shall be removed and the disturbed areas revegetated.
- C. Prior to applying for final inspection and release of the Performance Guarantee, the subdivider shall thoroughly clean and remove accumulated sediments from all storm drain lines, catch basin sumps, stormwater basins, and other drainage facilities within the development and such other lines into which the system empties as deemed necessary by the Lee DPW.

**§ 241-27. Maintenance; Homeowners' Association; Acceptance.**

- A. Maintenance Responsibility. The subdivider, or successor organization such as a Homeowners' Association, shall maintain all portions of the subdivision street and utilities within the street right of way, utility easements, and common areas until and unless the town votes to accept the subdivision streets and/or any of the utilities therein constructed. Snow removal and sanding of streets adequately for public safety shall be included in the maintenance responsibility.
- B. Legal Documents. The subdivider shall submit to the Board proposed documents for a Homeowners' Association, or other assurances as to the adequate provision for maintenance, either short-term or permanent, of the subdivision improvements at no expense to the Town. The documents shall be reviewed and approved by Town Counsel for adequacy and form.
- C. Acceptance of Road and Improvements.
  - (1) Approval of the Definitive Plan and release of the Performance Guarantee by the Board does not constitute acceptance as a Town Road nor imply that the town will vote to accept the street or utilities. (Refer to the town's General Bylaws for provisions related to Road Acceptance.)



- (2) Minor Lane Residential Subdivisions and other subdivisions submitted for approval with waivers on the basis of private maintenance shall not be eligible for acceptance, unless the Subdivision is subsequently resubmitted to the Planning Board for approval as an amended Subdivision and the street and other improvements are brought up to the current standards for a subdivision.
- (3) No street shall be submitted or voted upon for acceptance by the Town unless such street, utilities and all other required improvements are in compliance with all design and construction standards in effect at the time the street is proposed for acceptance, except insofar as such requirements have been expressly waived by the Planning Board and, where applicable, the Lee Department of Public Works.
- (4) No street shall be submitted or voted upon for acceptance until the completed street has successfully been in service through at least winter season (December 1 through March 1). The road shall be inspected by the Board and Lee DPW after the winter, to see if the road has any significant damage or defects. If so, the damage shall be repaired, and the street shall be required to go through another winter season and inspection before being eligible for acceptance.
- (5) Immediately prior to submitting the subdivision street(s) and/or utilities for acceptance, all parts of the drainage system shall be cleaned, all utilities in good working condition, streets swept, and the remainder of the right of way and any other areas proposed to be deeded to the town shall be cleaned, mowed, or otherwise put in first-class order.

## **ARTICLE V Administration**

### **§ 241-28. Waiver of requirements; severability.**

- A. Strict compliance with the requirements of these rules may be waived when, by majority vote of the Board and after a public hearing, such action is considered to be in the public interest and not inconsistent with the Subdivision Control Law. When granting a waiver, the Board shall clearly state in writing its reasons and make it part of its decision. Each waiver request shall be judged on its own merits and shall not be construed as setting a precedent.
- B. If any one provision of these regulations is found to be illegal and is therefore voided, this decision will not void any of the other provisions of these regulations.

### **§ 241-29. State law reference.**

For matters not covered by these regulations, reference is made to MGL c. 41, §§ 81K to 81GG, inclusive.

### **§ 241-30. Buildings for dwelling purposes.**

Not more than one building designed or available for use for dwelling purposes shall be erected or placed or converted to use as such on any lot in a subdivision, or elsewhere in the town, without the consent of the Planning Board. Such consent may be conditional upon the providing, to the satisfaction of the Board, of adequate ways furnishing access to each site for such building, in the same manner as otherwise required for lots within a subdivision.

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