

**RULES AND REGULATIONS  
GOVERNING THE SUBDIVISION OF LAND  
IN THE  
TOWN OF SHELBURNE  
FRANKLIN -COUNTY, MASSACHUSETTS**

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**These regulations were adopted in accordance with MGL, Chapter 41, Sections 81-K to 81-GG inclusive.**

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SUBDIVISION CONTROL BY-LAWSECTION I INTRODUCTION

1.1 Statutory Authority – Under the authority vested in the Planning Board of the Town of Shelburne by Sec. 81-Q, Ch. 41, M.G.L., said Board hereby adopts these regulations governing the subdivision of land, in order to guide its orderly development consistent with purposes of the Subdivision Control Law, M.G.L. Chapter 41, Sec. 81-K to 81-GG.

1.2 Purpose

- A. These Subdivision Regulations have been enacted to promote the health, safety, convenience and general welfare of the inhabitants of the Town of Shelburne, to protect the town and mitigate impacts from flooding, to protect the value of land and buildings, to conserve natural resources, to preserve the Town's cultural heritage, rural character and open farmland, and to facilitate residential, commercial and industrial development in a responsible manner.
- B. It is the intent of the Subdivision Control Law that any subdivision plan filed with the Planning Board shall receive the approval of said Board if said plan conforms to the Subdivision Control Law, the recommendations of the Board of Health, and to the rules and regulations of the Planning Board pertaining to subdivisions of land; provided, however, that such board may waive when appropriate, as provided for in MGL C. 41, S. 81-R, such provisions of the rules and regulations as deemed advisable (MGL C. 41, S. 81-M).

1.3 Definitions. Terms and words not defined in these regulations shall have the meanings defined in MGL C. 41, S. 81-L. The following terms and words shall have the following meanings:

- A. **APPLICANT** – The person or persons who apply for approval of a proposed subdivision plan. The “applicant” or “applicants” must be the owner or owners of all the land included in the proposed subdivision. An agent, representative or his assign may act for an owner, provided that written evidence of such fact is submitted. Evidence, in the form of a list of its officers, managers, managing members, or managing partners, and/or the designated authority to sign legal documents, as appropriate, shall be required for a corporation, limited liability company or partnership.
- B. **BOARD** – The Planning Board of the Town of Shelburne.
- C. **DEAD-END STREET (CUL-DE-SAC)** – A street, which joins another street at only one (1) end.
- D. **DEVELOPMENT IMPACT STATEMENT (DIS)** – A documented, written analysis of a proposed subdivision, which provides the Planning Board and its agents with information necessary for plan review for non-residential subdivisions and residential subdivisions serving ten (10) or more dwelling units. Prepared by the applicant, a DIS shall follow the

format presented in Appendix B of this document.

- E. ENGINEER – A Massachusetts registered professional engineer.
- F. FRONTAGE – The distance between the sidelines of a lot measured along the street line (where the lot meets the right-of-way of the street and where a street is defined as a public way that provides access for safe vehicular traffic, or a private way shown on the Definitive Plan of a subdivision approved by the Planning Board and actually built, and also located within the Town of Shelburne, which affords the principal means of vehicular access to abutting property and which, as defined, includes the entire right-of-way), being an unbroken distance along a street, and also provided that there are both rights of access and potential safe year-round practical vehicular access, unimpeded by:
  - 1) wetlands, unless a wetlands crossing has been approved by the Conservation Commission; or
  - 2) topography which prevents a proposed driveway from meeting the requirements the Zoning Bylaw, unless the Board of Appeals has granted an exception as provided for in the Zoning Bylaw; or,
  - 3) Other natural barriers between the street line and a potential building site, and the street has been determined by the Planning Board to provide adequate access to the lot under the provisions of the Rules and Regulations Governing the Subdivision of Land in the Town of Shelburne.
- G. LOT – An area of land under a single ownership, with specific legal boundaries, to be used as the site of one (1) or more buildings.
- H. MAJOR STREET – A street which, in the opinion of the Planning Board, is likely to carry substantial volumes of through traffic or one abutting a significant commercial or industrial development.
- I. SECONDARY STREET – A street that carries traffic equivalent to that generated by ten (10) or fewer dwelling units and having no abutting commercial or industrial property and which is not capable of extension.
- J. MINOR STREET – A street that provides vehicular access to and from a public street to which: (a) is no longer than 750 feet; (b) serves up to five lots which would otherwise be required to have their own access and frontage; (c) is jointly owned in fee or as an easement as specified on the deeds of the owners of the properties to which it provides access; (d) the maintenance of which is arranged between the joint owners as specified in deeded covenants; and/or lies entirely within the lots being served and/or the Open Space within an Open Space Development.
- K. OWNER – The owner of record as shown at the Franklin County Registry of Deeds or Land Court.
- L. SUBDIVISION – The division of a tract of land into two (2) or more lots and shall include resubdivision 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 in two (2) 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:

- 1) A public way or a way which the Town Clerk certifies is maintained and used as a public way.
- 2) A way shown on a plan theretofore approved and endorsed in accordance with the Subdivision Control Law; or
- 3) A way in existence when the Subdivision Control Law became effective in the Town of Shelburne 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 zoning or other bylaw, if any, for the erection of a building on such lot. Conveyances or other instruments adding to, taking away from, or changing the size and shape of lots in such a manner as not to leave any lot so affected without the frontage above set forth, or the division of a tract of land in which two (2) or more buildings were standing when the Subdivision Control Law went into effect in the Town of Shelburne into separate lots on each of which one (1) such building remains standing shall not constitute a “subdivision.”

Notwithstanding any other provision of this subsection, an owner of lots which would otherwise not meet the definition of a subdivision under this subsection but who wishes to have the subdivision of the lots be treated as an OSD, may elect to have the project be treated as if it is a subdivision subject to these Subdivision Regulations.

- M. SUBDIVISION CONTROL LAW – Refers to MGL C. 41 §§ 81-K to 81GG, titled “Subdivision Control,” as last amended.
- N. SURVEYOR – A Massachusetts registered land surveyor.
- O. ZONING – The Town of Shelburne Zoning Bylaw.<sup>1</sup> No subdivision rule may affect the size, shape, width, frontage or use of lots. All subdivisions will fully comply with the Town of Shelburne Zoning Bylaw.

1.4 Plan Submission

- A. Plans submitted for either review and approval under the Subdivision Control Law or for a determination that approval under the Subdivision Control Law is not required, shall be delivered to the Planning Board at a meeting of said Board, or shall be sent by certified mail to the Planning Board, postage prepaid. If so mailed, the date of receipt by the Town Clerk of the written notice of such filing (see Section 1.5B below) shall be the date of submission of the plan. The Town Clerk shall notify the Chair of the Planning Board, or designee, by phone or by other means within 24 hours of the date of submission of the plan to augment the Planning Board’s timely review of said plan. One Mylar original, two (2) paper copies and a digital copy in PDF format of said plan shall be furnished to the Town Clerk.

- B. The applicant shall provide written notice to the Town Clerk of such filing, together with a copy of the application form. Such notice shall be given by delivery or sent by certified mail and shall describe the land to which the plan relates, sufficient for identification and shall state the date on which such plan was submitted to the Planning Board, and shall include the name and address of the owner(s) of the subject land.
- C. **Submission Fees.** All fees will be received and recorded by the Planning Board. Said Board, will withhold approval of the Plan until the appropriate fees are paid in full. The fees indicated in Appendix C shall accompany the submittal of the application materials and plans specified in the Rules and Regulations, to cover costs of processing the application and professional staff assistance and review. The Fee Schedule is attached for convenience, but is not part of these Rules and Regulations.
- D. **Review and Inspection Fees.** The Board may assign its agent and may from time to time hire professional and technical assistance to review plans, conduct material testing, conduct property surveys of land and infrastructure, record and file documents and inspect improvements. The expenses for engaging professional and technical assistance and review in connection with a subdivision shall be borne by the applicant.

The appropriate professional and technical review fees (see Appendix C: Fee Schedule) shall be paid to the Planning Board for deposit into a special account established by the Town Treasurer under M.G.L. Chapter 44, Section 53G. Section 53G Employment of outside consultants allows that such rules shall provide for an administrative appeal from the selection of the outside consultant to the city council or town board of selectmen. The grounds for such an appeal shall be limited to claims that the consultant selected has a conflict of interest or does not possess the minimum required qualifications. The minimum qualifications shall consist either of an educational degree in or related to the field at issue or three or more years of practice in the field at issue or a related field. The required time limits for action upon an application by the planning board shall be extended by the duration of the administrative appeal. In the event that no decision is made by the city council or the town board of selectmen within one month following the filing of the appeal, the selection made by the planning board shall stand. Such an administrative appeal shall not preclude further judicial review, if otherwise permitted by law, on the grounds provided for in this section. Any such account shall be established by the municipal treasurer in the municipal treasury and shall be kept separate and apart from other monies. The special account, including interest, if any, shall be extended at the direction of the authorized board or authority without further appropriation; provided, however, that such funds are to be expended by it only in connection with carrying out its responsibilities under the law. Any excess amount in the account attributable to a specific project including any accrued interest, at the completion of said project shall be repaid to the applicant or to the applicant's successor in interest. The Town accountant shall submit annually a report of said special account to the Selectboard for their review. Said report shall be published in the city or town annual report. The Town accountant shall submit annually a copy of said report to the director of the bureau of accounts.

The fees, except the inspection fee, shall be paid at the time of submission of Preliminary and/or Definitive Plans, as described below. The inspection fee shall be paid at the time the Board endorses the Definitive Plan. The total dollar value of the professional and technical review fees to be deposited in this special account may exceed those listed in

Appendix C: Planning Board Fee Schedule and are to cover the cost of consultants based on an estimate from the consultants.

The balance of this account shall at no time be less than one-quarter (1/4) the initial review or inspection deposit, and the applicant shall deposit with the Town Treasurer such additional funds as are required to restore the account to the amount of the initial review or inspection deposit. If the applicant fails to restore the account balance and the balance is insufficient to pay incurred review and inspection fees, all work shall cease and all approvals suspend. The Town Treasurer shall send the invoice directly to the applicant. All fees past due by one month from the date of invoice shall be subject to a monthly interest charge based on additional professional or technical work, including inspections, until outstanding invoices are paid. Upon completion of a project, any excess amount in the account attributable to that project, including any interest accrued, shall be repaid to the Applicant or the Applicant's successor in interest

- E. Fee Delinquencies. The Board may refuse to accept for filing or approval any plan submitted by a person or entity that has outstanding and delinquent fees in connection with any other subdivision and/or plan previously submitted to the Board or taxes and/or fees owed to the Town or any of its departments, boards, commission and other official groups.
- F. Review of plans. The Planning Board may submit any plans filed for approval to any professional that they deem necessary for review. The cost of the review will be the responsibility of the applicant. In addition, the Planning Board may seek review and approval of said Plan by the Highway Superintendent, the Fire Department and other municipal departments to ensure said plan allows for adequate access to lots for municipal services.

1.5 Waivers. The Planning Board may, in special and appropriate cases, waive strict compliance with such portions of these Rules and Regulations, as provided for in Section 81-R, Chapter 41, of the General Laws, where such action is in the public interest and not inconsistent with the purpose and intent of the Subdivision Control Law. Waivers are only granted for projects, which provide, in the sole opinion of the Planning Board, clear and significant improvements to the quality of a project in comparison to a subdivision, which meets the minimum requirements of the subdivision regulations.

- A. Limited waivers may be granted when appropriate to encourage development, which is in keeping with the character of traditional neighborhood development designed to encourage more protected open space, playgrounds, walking and bicycling paths, and affordable housing, than required by zoning.
- B. Procedures for Requesting a Waiver:
  - 1) The applicant when requesting a waiver of a requirement, rule, or regulation must submit the request to the Planning Board in writing, and preferably at the same time as the submission of the Preliminary Plan.
  - 2) The Planning Board shall notify the applicant in writing of its approval, disapproval, or approval with conditions (the letter describing the Board's approval with

conditions can be a copy of the document attached to the plan as described below).

- 3) If the Planning Board approves the request for a waiver, it shall endorse the conditions of the waiver (if any) on the plan or, describe them in a separate document attached to and referenced to the plan, which shall for the purpose of the subdivision control law be deemed to be a part of the plan.

C. Except as specifically provided in a written waiver from the Planning Board, all projects must be totally in compliance with the subdivision regulations and must be approved and endorsed by the Planning Board before development can begin.

SECTION II PLAN PROCEDURES

2.1 General. Only those plans which constitute “subdivision” as that term is defined in the statute (Sec. 81-L, Ch. 41, M.G.L.) require the approval of the Planning Board. However, all plans, whether "subdivisions" within the meaning of said law or not, must have either approval as a subdivision or endorsement that they do not require approval before they will be accepted for recording at the Registry of Deeds or registration at the Land Court.

2.2 Plan Believed to be an “Approval Not Required” (ANR) Plan.

- A. Any person who believes his/her plan does not require subdivision approval because it does not show a “subdivision” as defined in M.G.L. c. 41 §81L, shall submit the mylar plan, together with two paper copies and an application form (“Form A”) to the Planning Board, accompanied by a filing fee (see Fee Schedule in Appendix C) and any documentation necessary to demonstrate that the plan does not require approval under the Subdivision Control Law.
- B. A plan submitted under Section 2.2 shall be prepared by a registered land surveyor or professional engineer, in accordance with the applicable requirements of the Franklin County Registry of Deeds, and shall, at a minimum, show the following information:
  - 1) The name(s) of the record owner(s) of the subject land, and the names of the owners of all adjacent land as determined from the most recent tax records of the Town;
  - 2) The location of all existing buildings on the subject land and on adjacent lots under the same ownership within 100 feet of the lot line of the subject land;
  - 3) The name(s) of the engineer, or surveyor;
  - 4) The existing lines of streets, ways, easements and any public areas;
  - 5) The location of all easement and rights of way located on or serving the subject land;
  - 6) The existing and proposed boundaries of the subject land and of each parcel and lot created or altered by the plan including the acreage of each parcel or lot created and the length of each boundary line in feet;

- 7) The zoning classification of the subject land and of the abutters land;
  - 8) A locus plan at a scale of 1" = 600 feet showing the subject land in relation to the nearest intersecting street(s);
  - 9) The locations, widths, and names of all abutting ways;
  - 10) A notation reading:  
"Endorsement of this Plan does not certify compliance with zoning or any town bylaw or ordinance."
  - 11) A copy of a USGS Topographic map with the boundary of the project site outlined shall be submitted along with the plan.
- C. Frontage on an Existing Way. In determining whether an existing way or a way in existence on September 6, 1972, when the Subdivision Control Law came into effect in Shelburne, provides adequate frontage to qualify a plan as not a subdivision, the Board will *at a minimum* consider the following:
- 1) Is the right-of-way at least 30 feet wide and of reasonable horizontal alignment?
  - 2) Does the existing horizontal and vertical alignment of the roadway provide safe visibility?
  - 3) Is the roadway at least sixteen (16) feet wide with an additional two (2) feet of shoulder on each side (20 feet wide in total) to provide space for snow removal.
  - 4) If the road could ever service more than ten dwelling units, is it bituminous surfaced or have provisions been made for such surfacing without cost to the town?
  - 5) Have provisions been made for public utilities without cost to the town?
  - 6) Is the grade less than or equal to 10% .
  - 7) Any other requirement the Planning Board deems necessary to assure that the roadway has sufficient grade, width, and depth to assure safe vehicular traffic including emergency vehicles.

The Board will not normally find a way in existence when the subdivision control law became effective in Shelburne to provide adequate frontage unless it meets the above standards. However, the Board may waive strict compliance with a standard upon its determination, following consultation with the Selectmen, Highway Superintendent, Police Chief and Town of Shelburne Fire Chief or the Fire Chief of the Shelburne Falls Fire and Water District, as appropriate, that the way will, in fact, be adequate to provide for the needs of vehicular traffic in relation to the proposed use of the land abutting thereon or served thereby, and for installation of municipal services to serve such land and the buildings erected or to be erected thereon.

- D. Frontage on Approved Subdivision Ways. A major or secondary street shown on an

approved subdivision plan will be considered as frontage for purposes of M.G.L. §81L only if either: (a) the way and any associated municipal services are fully constructed in accordance with the Planning Board's approval of such Subdivision plan, or (b) such construction has been adequately secured in accordance with M.G.L. c. 41, §81U.

- E. Frontage on a Public Way. When the lots shown on a plan presented for endorsement under §2.2 are claimed to have frontage on a public way, the way must physically exist on the ground and be adequate for safe vehicular access, including emergency vehicles, to the proposed lots. Additionally, the Planning Board may require documentation evidencing the layout and acceptance of the way as a public way.
- F. Adequacy of Access. In addition to determining that all lots shown on a plan presented for endorsement under §2.2 have the required frontage on one of the three types of ways specified in M.G.L. c. 41, §81L, before endorsing a plan as "approval under the subdivision control law not required," the Planning Board must also determine that each lot shown on the plan has practical access from the way upon which the lot fronts, in that there are no legal or physical impediments which prevent adequate access to the lot.
- G. Time Limit. Pursuant to M.G.L. c. 41, §81P, if the Board fails to act upon a plan submitted under §2.2, or fails to notify the Town Clerk and the applicant of its action within twenty-one (21) days after the plan submission, the Board shall be deemed to have determined that approval under the Subdivision Control Law is not required, and shall forthwith make such endorsement on the plan. If the Board fails to make such endorsement, the Town Clerk shall issue a certificate to the same effect.
- H. If the Board determines that the plan does not require approval, it shall forthwith, at a regularly scheduled Planning Board meeting and without a public hearing, endorse on the plan the words "Planning Board approval under the Subdivision Control law not required." The Board shall then sign said endorsement. Said plan shall then be returned to the applicant, and the Board shall notify the Town Clerk of its action. The applicant shall provide the Board with two (2) copies of the endorsed print. In the event that there is not a regularly scheduled Planning Board meeting within the twenty-one (21) day time limit, the Chair of the Planning Board may schedule a Planning Board meeting to review the ANR plan at his or her discretion.
- I. If it deems necessary, the Planning Board shall have the plan reviewed by a Massachusetts registered engineer before making a determination. The cost shall be borne by the applicant (see Section 5.3.)
- J. The Planning Board will notify the applicant within 21 days of the submittal of an ANR Plan if it does not meet the requirements of this section and the reason for denying approval of the ANR Plan.

2.3 Subdivision Plans requiring approval by the Planning Board. No person shall make a subdivision within the meaning of the Subdivision Control Law of any land within the Town, 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 approved by the Planning Board.

### 2.3.1 Access Adequacy

- A. General. Plans shall be endorsed as not requiring approval under the Subdivision Control law, and subdivision plans shall be approved only if each building lot to be created by such plan has adequate access as intended under the Subdivision Control Law, MGL C. 41, S. 81-K through 81-GG.
- B. Standards of Adequacy. Streets within a subdivision shall be considered to provide adequate access if, and only if, complying with all of the standards established in this regulation.
- C. Obligations. The Board may require as a condition of its approval of a subdivision plan, that the developer dedicate a strip of land for the purpose of widening accessways to a width as required above and that they either make physical improvements within such way or compensate the town for the cost of such improvements in order to meet the standards specified above.
- D. Ways Providing Access to Streets within a Subdivision. Ways providing access to streets within a subdivision shall normally be considered to provide adequate access only if they comply with all of the standards herein for subdivision streets including but not limited to the right-of-way width, pavement width, maximum grade, foundation and surfacing materials, and sight distance requirements of this regulation. The Board may waive strict compliance with these access requirements only upon its determination, following consultation with the Select Board, Superintendent of Streets, Police Chief and Fire Chief, that the way will be sufficient to serve the access needs of the potential uses of land in the subdivision.

2.3.2 Pre-submission review. Prior to investing in extensive professional design efforts for preliminary or definitive subdivision plans, it will be beneficial for the prospective applicant to discuss his/her ideas with the Planning Board. Doing so may be useful in avoiding problems at a later stage of the subdivision review process. Pencil sketches of the prospective subdivision will be helpful in the discussion.

### 2.3.3 Preliminary Subdivision Plan

- A. General.
  - 1) Non-Residential Subdivision. In the case of a proposed nonresidential subdivision, a preliminary plan of the proposed subdivision must be submitted to the Planning Board and to the Board of Health.
  - 2) Residential Subdivision. In the case of a proposed subdivision with lots in a residential zoning district, the applicant may submit a preliminary plan of the proposed subdivision to the Planning Board and to the Board of Health.
  - 3) The submission of such a preliminary plan will enable the Applicant, the Planning Board, the Board of Health, other municipal boards and departments, as appropriate,

and owners of property abutting the subdivision to discuss and clarify the problems of such subdivision before costly engineering drawings for a definitive plan are prepared. Therefore, even for residential subdivisions it is strongly recommended that a preliminary plan be filed.

- 4) Alternatives Assessment. For residential subdivisions, when a developer is not proposing an alternative development option as allowed by the Shelburne zoning bylaws, then the Preliminary Plan shall include the alternative plan as an alternative concept for developing the parcel(s). When a developer is proposing a alternative development plan, the Preliminary Plan submission shall not require an alternate plan.

The Planning Board will not approve preliminary plans until issues relating to road layout, road alignment, intersections with existing streets, vehicular and non-vehicular connections to adjoining properties, and general project issues have been satisfactorily addressed. Other strictly engineering issues, such as detailed drainage, water and sewer engineering, may be addressed at the definitive stage. If the applicant does not provide engineering analysis at the preliminary stage, however, the Planning Board will not be able to provide feedback and any future approval is based on the applicant being able to satisfactorily address these issues, at the Definitive Plan stage. Applicants should be prepared to discuss issues in a general way that will be addressed by the Development Impact Statement that accompanies the Definitive Plan (see Section 2.5).

The centerline of the proposed roadway and all property lot lines shall be adequately and accurately staked or flagged on the site sufficient for identification by the Planning Board members and their agents.

**B. Application filing procedure.**

- 1) Any person who submits a Preliminary Plan shall deliver such plan and shall give notice to the Town Clerk or shall send such plan by certified mail to the Planning Board c/o the Town Clerk. Receipt of such plan stamped by the Town Clerk on behalf of the Planning Board, shall constitute the date of submission. Such plan shall be accompanied by the completed Form B and filing fee (See attached fee schedule) in the form of a certified check or money order made payable to the Town of Orange. In addition, any person who submits a Preliminary Plan shall also submit the plan to the Board of Health at the same time. (see 2.3.3.B.(2)).
- 2) The applicant shall file the original preliminary plan and nine (9) copies with the Planning Board c/o the Town Clerk and two (2) copies with the Board of Health. Each copy submitted by the applicant shall have a tag or form attached (see Form L) listing the Board or municipal official that should receive it. The original preliminary plan date stamped should be placed in the Planning Board files. The Town Clerk or their designee shall distribute the hard copies of the Preliminary Plan to the Planning Board, Building Inspector, Conservation Commission, Board of Selectmen, Police Chief, Highway Superintendent, and as appropriate, the Town of Shelburne Fire Chief, the Board and Fire Chief of the Shelburne Falls Fire and Water District, and /or the Shelburne Falls Sewer Commissioners.

- 3) The applicant shall also submit an electronic PDF version of the Preliminary Plan to the Planning Board, transferred through a medium specified by the Board. The electronic PDF version of the Preliminary Plan will be distributed by the Town Clerk or their designee to the Planning Board, Building Inspector, Conservation Commission, Board of Selectmen, Police Chief, Highway Superintendent, and, as appropriate, the Town of Shelburne Fire Chief, the Board and Fire Chief of the Shelburne Falls Fire and Water District, and/or Shelburne Falls Sewer Commissioners. The above Town officials shall, with thirty (30) days after the filing of the plan, report in what respects, if any, the proposed subdivision streets and improvements would fail to comply with the standards for design, layout, and construction by the Town, could fail to support adequate public services such as fire protection, wastewater treatment or public water supply, or could present other development concerns.

C. Contents.

- 1) The preliminary plan shall be drawn on mylar or paper, twenty-four by thirty-six (24x36) inches, at a scale of one hundred 40 feet to one (1) inch or other scale approved by the Planning Board and shall be identified as a preliminary plan. At a minimum, a preliminary plan shall include the following information:
  - a) The subdivision name, boundaries, north point, date, scale, legend, and the title "Preliminary Plan;"
  - b) The name(s) of the record owner(s), the Applicant(s), and the designer, engineer or surveyor, including their seal and certificate number;
  - c) The names of all abutters as determined from the most recent local tax list;
  - d) The existing and proposed lines of streets, ways, easements, and any public areas within the subdivision in a general manner, with the proposed names of new streets shown in pencil until they have been approved by the Board;
  - e) The proposed system of drainage, including adjacent, existing natural waterways, in a general manner;
  - f) The approximate boundary lines of proposed lots, with approximate areas and dimensions;
  - g) The names, approximate location and widths of adjacent streets;
  - h) The Topography of the land through existing (broken line) and proposed (solid line) at ten-foot contour intervals, including the finished grade of all lots;
  - i) Zoning district(s) within which the development is to be sited;
  - j) Any floodplains or inundation areas of high or significant hazard dams.

- k) Natural features including stonewalls, trees exceeding ten inches diameter at breast height, floodplains and rock outcroppings, trees, wetlands, rare species habitats, areas within the 100-year floodplain, areas within inundation areas of any high or significant hazard dams.
  - l) Proposed sanitary sewer/septic and private well/ water distribution systems.
  - m) An index plan at a scale of one (1) inch equals two hundred (200) feet, when multiple sheets are used.
  - n) A key plan at a scale of one (1) inch equals one thousand (1,000).
  - o) Initial findings, in a general way, of the Development Impact Statement analysis required with the Definitive Plan.
  - p) Alternative Preliminary Plan for alternative development if required (see 2.3.3.A.).
- 2) In addition, to promote better understanding, it is requested that the following be submitted:
- a) A locus plan of the subdivision, showing its street configuration in relation to the surrounding area, at a scale of one (1) inch equals six hundred (600) feet; and,
  - b) In the case of a subdivision covering less than all of the land owned by the Subdivider in the area of the subdivision, a plan showing in a general manner the proposed overall development of the remaining land.
- D. Approval or disapproval of preliminary plan. Within forty-five (45) days after submission of a Preliminary Plan, the Planning Board shall approve such plan, with or without modifications suggested by it or agreed upon by the person submitting the plan, or the Board shall disapprove such Preliminary Plan and, in the case of disapproval, shall state its reasons therefore. The Planning Board shall notify the Town Clerk of its decision and shall notify the applicant by certified mail.
- E. Relation of Preliminary Plan to definitive plan and zoning provisions. Approval of a preliminary plan does not constitute approval of a subdivision, and a preliminary plan may not be recorded in the Registry of Deeds. Provided that a definitive plan is duly submitted within seven (7) months from the date of submission of the preliminary plan, the subdivision rules and regulations in effect at the time of submission of the preliminary plan shall govern the definitive plan, and if the definitive plan is ultimately approved, the zoning provisions in effect at the time of submission of the preliminary plan shall govern the land shown on the plan for eight (8) years from the date of endorsement of approval of the subdivision plan (MGL c. 40A, §6).

**2.4 Definitive Plan.**

**A. Application Procedure.**

- 1) General.
  - a) A Definitive Plan shall be governed by the Subdivision Regulations in effect at the time of submission of such plan or in effect at the time of submission of a Preliminary Plan, provided that a Definitive Plan evolved therefrom shall have been submitted to the Planning Board within seven (7) months from the date of submission of the Preliminary Plan.
  - b) A Definitive Plan shall also be governed by the Town of Shelburne Zoning Bylaws in effect at the time of submission of such plan or a Preliminary Plan from which a Definitive Plan is evolved, in accordance with the provisions of MGL C. 40A, S. 6, as amended.
- 2) Filing procedures.
  - a) Any person who submits a Definitive Plan of a subdivision shall give notice and deliver such plan to the Town Clerk or shall send such plan by certified or registered mail to the Planning Board c/o the Town Clerk. Receipt of such plan and filing fees by the Town Clerk on behalf of the Planning Board, shall constitute the date of submission. In addition, any person who submits a Definitive Plan shall also submit copies of the plan to the Board of Health at the same time. The Town Clerk or their designee shall distribute the hard copies of the Definitive Plan to the Planning Board, Conservation Commission, Board of Selectmen, Highway Superintendent, Building Inspector, Fire Chief(s), Police Chief, and, as appropriate, the Town of Shelburne Fire Chief, the Board and Fire Chief of the Shelburne Falls Fire and Water District and/or the Shelburne Falls Sewer Commissioners. The electronic PDF version of the Definitive Plan will be distributed by the Town Clerk or their designee to the Planning Board, Board of Health, Board of Selectmen, Conservation Commission, Fire Chief(s), police Chief, Highway Superintendent, Building Inspector, as appropriate, the Town of Shelburne Fire Chief, the Board and Fire Chief of the Shelburne Falls Fire and Water District, and/or the Shelburne Falls Sewer Commissioners, Superintendent of Schools, Historical Commission, Agricultural Commission, and Open Space Committee.
  - b) The applicant shall file with the Planning Board the following:
  - c) An original reproducible drawing of the Definitive Plan and nine (9) copies of the plan and application thereof. Each copy submitted by the applicant shall have a tag or form attached (see Form L) listing the Board or municipal official that should receive it. The original drawing may be returned to the applicant after a decision on the plan by the Board. The applicant shall also submit an electronic PDF version of the Definitive Plan to the Planning Board, transferred through a medium specified by the Board.
  - d) One (1) properly executed application including Form C.
  - e) A filing fee of according to the attached fee schedule (Appendix C) in the form of a certified check or money order made payable to the Town of Shelburne. Any

additional expenses for professional assistance related to the application including the review of the plans, survey or inspections shall also be paid by the applicant (see Section 5.3.) In addition, the applicant will be billed for the cost of the newspaper publishing the legal notices.

- f) A list of abutters certified by the Shelburne Assessors.
  - g) A list of any waivers requested pursuant to Section 1.5 and the reason for the request.
  - h) The applicant shall file with the Board of Health the following:
    - (3) At the time of the filing of the Definitive Plan with the Town Clerk, two (2) copies shall also be filed with the Board of Health.
    - (4) Two (2) copies of the application with the properly executed Form C.
- 3) Board of Health Review.
- a) The Board of Health shall report, in writing, to the Planning Board and subdivider its approval or disapproval of said Plan.
  - b) In the event of disapproval, it shall make specific findings as to which, if any, of the lots or areas shown on said plan cannot be used as building sites without injury to the public health. The Board of Health shall include specific findings and the reasons therefore in such report, and, where possible, it shall make recommendations for adjustments necessary for the Plan's approval.
  - c) Any approval by the Planning Board shall be on the condition that lots or areas deemed injurious to the public health shall not be built upon without prior consent of the Board of Health. The Planning Board shall endorse on the Plan such conditions, specifying the lots to which said conditions apply.
  - d) Failure by the Board of Health to report on the proposed subdivision within forty-five (45) days after the filing of the plan shall be deemed approval of the Plan by the Board of Health.
  - e) When the Definitive Plan shows that no public or community sewer is to be installed to serve any lot thereon, approval of the Definitive Plan by the Board of Health shall not be treated as, nor deemed to be approval of a permit for the construction and use on any lot of an individual sewage system; and approval of a Definitive Plan for a subdivision by the Board of Health shall not be treated as, nor deemed to be, an application for a permit to construct or use an individual sewage system on any lot contained therein. Such application for a permit to construct or use an individual sewage system must be filed separately with the Board of Health.
- B. Definitive plan contents. The definitive plan shall be clearly and legibly drawn in black ink upon mylar or paper. The sheet size shall not exceed twenty-four (24) inches by thirty-six (36) inches. The plan shall be at the scale of one (1) inch equals forty (40) feet

or such other scale as the Board may accept to show details clearly and adequately. If multiple sheets are used, they shall be accompanied by an index sheet showing the entire subdivision. The data required below may be on separate sheets as is necessary. The definitive plan shall contain the following:

- 1) The subdivision name, boundaries, North point, legend, date and scale. All elevations shall be tied to the United States Geological Survey bench marks if within five hundred (500) feet of the subdivision using the Datum of 1983 (NAD83, or the United States Geodetic Survey benchmarks, if such exist within twenty-five hundred (2,500) feet of the subdivision, whichever is closer.
- 2) The name and address of the record owner and of the Subdivider and the stamp and signature of the registered land surveyor and any other professionals engaged in the design.
- 3) The location and names of all abutters as they appear in the most recent local tax list and the designation of zoning districts.
- 4) Existing and proposed lines of streets, ways (including ancient ways), paths, lots, easements (and their purpose), and public or common areas within the subdivision. The suggested names of streets shall be clearly shown as “proposed” until they have been approved by the Board of Selectmen.
- 5) Plans shall clearly display the location, direction and length of every street and right of way line, easements, lot lines and boundary lines and to establish those lines on the ground. If the proposed subdivision is within five hundred (500) feet of a monument of the Massachusetts Coordinate System Survey monument system, it shall be tied to that system.
- 6) Road center-line stationing, referenced to the street plans and profiles.
- 7) The existing location of the base flood elevation as shown on flood insurance maps issued by the Federal Insurance Administration, on file with the Building Inspector and Town Clerk.
- 8) Lot numbers.
- 9) Zoning districts of all areas shown on the plan.
- 10) A locus plan showing the location of the subdivision at a scale of one (1) inch equal one thousand (1,000) feet and an index plan at a scale of one (1) inch equals two hundred (200) feet or at a scale matching that used on the Assessors’ maps.
- 11) The location of all permanent monuments, properly identified as to whether existing or proposed.
- 12) The location, names and present widths of streets bounding, approaching or within reasonable proximity within 1,000 feet of the subdivision.

- 13) Existing and proposed watercourses, ponds and wetlands.
- 14) Suitable space to record the action of the Board and the Town Clerk's certification, as defined in MGL c. 41, § 81V.
- 15) The location and results of all percolation and soil tests to evaluate subsurface conditions for each lot and/or for any community or shared septic system in the prospective subdivision. The tests will be done in accordance with the Department of Environmental Protection's Title 5 regulations and local health and septic regulations, if any. A registered Professional Engineer or sanitarian must stamp the plan and the test results. If the proposed subdivision will be served by the municipal wastewater treatment facility then the applicant must obtain a letter from the Water Commissioners certifying that there is sufficient wastewater treatment capacity to serve all the lots in the subdivision.
- 16) Major site features, such as existing stone walls, fences, buildings, large trees, rock ridges and ledge, floodplains, historic features, inundation areas for high or significant hazard dams, natural waterways, water bodies, wetlands, certified vernal pools, drainage courses, public water supply recharge areas (Zone 2), NHESP Priority and Estimated habitats of rare species, prime farmland or and forestland on land within the proposed subdivision and the adjacent 100 feet surrounding the subdivision. The plan shall identify which of the above the developer intends to remain undisturbed.
- 17) Hydrology Study and Drainage Calculation. The applicant shall submit drainage calculations, including rational method and TR-55 or TR-20, showing: a) that any proposed drainage system has been designed according to the standards set forth in these rules and in any applicable state and federal regulations; and b) any impact said drainage system would have on existing drainage systems downstream from the proposed point of discharge.
- 18) Sanitary Sewer Study. The applicant shall submit calculations showing a) that any proposed sanitary sewer systems has been designed according to the standards set forth in these rules and state Title 5 regulations; and b) any impact said sanitary system would have on existing sanitary systems from the proposed point of discharge.
- 19) Development Impact Statements (see Section 2.7). For subdivisions serving ten (10) or more dwelling units, the developer shall submit an analysis of the impact of the proposed development by qualified professionals (see Appendix B). Each of the sections of said analysis (water, sewer, etc.) shall be presented as a separate document so that it can be forwarded by the Planning Board to the appropriate reviewer. The purpose of said analysis is to assist the Planning Board in assessing the cumulative impact of development. Regardless of the above, the Planning Board's decision shall be based on criteria set in these regulations.
- 20) A civil engineer's stamp and signature.
- 21) A registered land surveyor's stamp and signature.

- 22) Existing (solid line) and proposed (broken line) topography at one foot contour intervals, including the finished grade of all lots.
  - 23) The size and location of existing and proposed water supply facilities either private wells or public water supply. If the proposed subdivision will be served by the municipal public water supply then the applicant must obtain a letter from the Shelburne Falls Water Commissioners certifying that there is sufficient capacity available to provide potable water to all lots in the subdivision.
- C. Street plans and profiles. For every street there shall be a separate plan at one (1) inch equals forty (40) feet and a profile at one (1) inch equals forty (40) feet horizontal, one (1) inch equals four (4) feet vertical, showing the following data:
- 1) The exterior lines of the way, with sufficient data to determine their location, direction and length.
  - 2) The existing center-line profile, to be shown as a fine full line. The existing center-line profile for intersecting streets shall be shown for at least one hundred (100) feet on each side of the intersection of street center lines. All elevations shall be tied to the United States Geological Survey bench marks if within five hundred (500) feet of the subdivision using the Datum of 1983 (NAD83, or the United States Geodetic Survey benchmarks, if such exist within twenty-five hundred (2,500) feet of the subdivision, whichever is closer.
  - 3) The proposed road profile shall be shown as a heavy full line with proposed centerline grades and elevations shown every fifty (50) feet or every twenty-five (25) feet for vertical curves.
  - 4) Existing and proposed watercourses, ponds and wetlands.
  - 5) All drainage facilities shall be shown on the plan and profiles, showing length and pipe sizes, rim and invert elevations, and slopes.
  - 6) The location and size of existing and proposed water mains, hydrants and main gate valves.
  - 7) The location of existing and proposed cable utilities and their appurtenances.
  - 8) The location of the following, unless waived by the Board: existing and proposed street paving, sidewalks, streetlighting, curbs and gutters.
  - 9) As long as the work is related to the proposed subdivision, profiles shall be shown, even if the new work is outside said subdivision.
  - 10) Water mains will be shown in profile to demonstrate sufficient clearance of other structures.
  - 11) The size and location of all other utilities to be placed in the right-of-way shall be shown. These shall be placed so as to minimize flood damage.

- 12) The location of any intersected public or private way shall be shown.
- 13) Typical street cross-sections for each class of street within the subdivision, drawn at 1" = 4', showing location of all elements within the street right-of-way including street sections showing paving, crown, berm, shoulder and distance to the right-of-way line, as well as typical cross-sections of any altered drainage courses or off-street paths shall be drawn.
- 14) An erosion and sedimentation control plan designed to mitigate and prevent erosion/sedimentation of disturbed areas during and after construction activities. The plan shall show, in detail, what and when such measures will be implemented, on both a temporary and permanent basis, including land disturbances for house construction.
- 15) A completed Low Impact Development (LID) Site Planning and Design checklist, see Appendix E.
- 16) Suitable space to record the action of the Board and signatures of Board members.
- 17) Any other information that the Board may deem necessary.

D. Plan processing.

- 1) **Public Hearing:** Before approval, modification, or disapproval of the Definitive Plan is given, a public hearing shall be held by the Planning Board. Said public hearing shall be held after the Board of Health and other Town officials report on the plan, or after the forty-five day period to report expires. Notice of the specific time and place of the Public Hearing shall be given by the Planning Board at the expense of the applicant by advertisement in a newspaper of general circulation in the Town of Orange once in each of two (2) successive weeks, the first publication being not less than fourteen (14) days before the date of such hearing. Such Public Hearing notice shall also be posted in Town Hall for fourteen (14) days prior to the date of the Public Hearing. A copy of the Definitive Plan shall be available to the public through the Town Clerk's office not less than fourteen (14) days before the date of the public hearing.

A copy of said notice of the public hearing shall be mailed by the Board, by registered or certified mail, to all owners of land abutting the proposed subdivision and to the abutters of the abutters within three hundred (300) feet of the site. The Planning Board shall also send notice of a public hearing to the following: the Board of Selectmen, the Board of Health, the Conservation Commission, the Fire Department, the Police Department, the Highway Department, the Building Commissioner, the Water Department, the Wastewater Treatment Facility Chief Operator, the Superintendents of Schools, Historical Commission, and Agricultural Commission. The expense of these notifications and publications shall be borne by the applicant.

- 2) Review by other Town Officials

- a) Compliance with the Wetlands Protection Act: In accordance with MGL C. 131, .40, no person shall remove, fill, dredge or alter any watercourse, pond, floodplain or wetland without filing writing intention to perform said work with the Shelburne Conservation Commission and with the Commonwealth Department of Environmental Protection. Permission for such work must be obtained from the Conservation Commission.
  - b) The Town Clerk, shall notify, without delay, the Board of Selectmen, Conservation Commission, Fire Chief, Police Chief, Highway Superintendent, Building Inspector, Water Commissioners, Superintendents of Schools, Historical Commission, Open Space Committee, and Agricultural Commission that the Definitive Plan is available for review including the layout of the proposed improvements. The above Town officials shall, within forth-five (45) days after the filing of the plan, report in what respects, if any, the proposed subdivision streets and improvements would fail to comply with the standards for design, layout, and construction by the Town, could fail to support adequate public services such as fire protection, wastewater treatment or public water supply, or could present other development concerns. The above Town officials may also make such recommendations and suggestions to the Planning Board for other town services, including public safety, which, in their opinion, would improve the subdivision and its future development as an integral part of the entire town.
- E. Approval, modification or disapproval. The action of the Board with respect to such definitive plan shall be by vote. The Board shall take final action on the Definitive Plan within one hundred and thirty-five (135) days if no Preliminary Plan was filed or within ninety (90) days if a Preliminary Plan was filed. Copies of said vote shall be certified and filed with the Town Clerk and a copy sent by delivery or registered mail to the applicant. An extension may be granted if mutually agreed to in writing by the Applicant and the Planning Board and filed with the Town Clerk. If the Board modifies or disapproves such plan, it shall state in its vote the reasons for its action.
- 1) Criteria for action by the Board shall be the following:
    - a) Completeness and technical adequacy of all submissions.
    - b) A determination that development at this location does not entail unwarranted hazard to the safety, health and convenience of future residents of the development or to others.
    - c) Conformity with the design standards of Section III.
    - d) A determination that the subdivision plan is in conformance with the Board of Health recommendations, if any.
    - e) Conformity with all applicable zoning requirements.
    - f) No outstanding fees; all fees have been paid by the Applicant.

- g) Compliance with the requirements of all these Rules and Regulations (not waived).
- 2) 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 the Clerk has notified the Board that no appeal has been filed.
- 3) Approval of the definitive plan or release of security does not constitute the laying out or acceptance by the town of Shelburne of streets or easements within a subdivision.
- 4) Following endorsement of the plan by the Board, the applicant shall provide the Board with one (1) reproducible copy and three (3) contact prints, and one (1) electronic copy in PDF form transferred through a medium specified by the Board, of the definitive plan and of the street plan and profiles, a copy of the definitive plan, as recorded, noting book, page number and date of recording, and a copy of final covenants and restrictions for its files.

F. Rescission.

- 1) Failure of the developer to record the definitive plan at the Registry of Deeds within six (6) months of its endorsement or to comply with the construction schedule of the performance agreement (Form E, Performance Bond, or Form F, Covenant), shall constitute sufficient reason for the rescission of such approval, in accordance with the requirements of MGL c. 41, § 81W.
- 2) A failure by the applicant to request endorsement of the plan or failure by the applicant to provide an adequate restrictive covenant within six months of the Planning Board's vote of approval shall result in automatic rescission of the Definitive Plan approval.

2.5 Restrictive covenant.

- A. The applicant shall file a Restrictive Covenant executed and duly recorded by the owner of record, running with the land, whereby such ways and services shall be provided to serve any lot before such lot may be built upon or conveyed, other than by mortgage deed; provided that a mortgagee who acquires title to the mortgaged premises by foreclosure or otherwise and any succeeding owner of such premises or part thereof may sell any such lot, subject to that portion of the covenant which provides that no lot shall be built upon until such ways and services have been provided to serve such lot; and provided further, that nothing herein shall be deemed to prohibit a conveyance by a single deed, subject to such covenant, of either the entire parcel of land shown on the subdivision plan or of all lots not previously released by the Planning Board. A deed of any part of the subdivision in violation hereof shall be voidable by the grantee prior to the release of the covenant but not later than three years for the date of such deed.
- B. Form of Restrictive Covenant. The restrictive covenant shall be in the form and contain the language as shown in the form entitled "Approval with Restrictive Covenant" or as

otherwise required or approved by the Planning Board.

C. Partial Release. Prior to final release of a restrictive covenant, the Planning Board may grant one or more partial releases from the restrictive covenant unless:

- 1) Construction of streets and ways, and installation of municipal services and other improvements in accordance with the approved Definitive Plan for said lots has been completed; OR
- 2) If the Planning Board determines that: (a) the streets and ways, installation of municipal services and other improvements have been substantially completed AND (b) full completion will be accomplished with 12 months of the Planning Board’s partial release, AND (c) the developer of the lots has provided a deposit of money restrictive covenant sufficient to complete said streets and ways, municipal services and other improvements within the said 12 ;month period. The form entitled “Release of Lots – Certificate of Performance shall be submitted when applying for a partial release of lots from a restrictive covenant.

D. Restrictive Covenant Deposit. In determining the amount of the developer’s required deposit of money restrictive covenant, the Planning Board shall require from the applicant a detailed cost estimate for all construction within the proposed roadway layout and any utility easements, certified by the project’s Registered Professional Engineer. The Planning Board shall have the right to increase the required amount deposited as necessary over time to insure sufficient restrictive covenant. Said estimate shall be based upon the current edition of the Massachusetts Department of Transportation’s “Standard Specifications for Highways and Bridges.” The cost estimate shall include:

- 1) Quantity, unit price and total amount for each construction item.
- 2) Total amount for cost of completion of project.
- 3) Costs adjusted to account for municipal prevailing wages rates, and all municipal procurement requirements under state law and Town of Shelburne bylaws and Town of Shelburne practices for construction projects.
- 4) Costs adjusted to add a minimum 25% inflation/overrun contingency factor up to 50%, as determined by the Planning Board.
- 5) Engineering inspection, materials testing, legal and other soft costs.

E. Final release. Upon the completion of the construction of streets and ways, and the installation of municipal services and other improvements in accordance with the approved Definitive Plan, the applicant may request release of the restrictive covenant, by sending a statement of completion and a request for release by registered mail to the Town Clerk and the Planning Board. The Board shall act on such request within forty-five (45) days.

- 1) Such statement shall be accompanied by the following:

- a) Written certificate from a registered civil engineer of the Planning Board's choosing that the streets, drainage, and utilities conform to the Planning Board's requirements in accordance with the approved Definitive Plan.
  - b) Written certificate from a registered civil engineer of the Planning Board's choosing that the water mains, sanitary sewers, storm sewers and hydrants conform to specifications and the Planning Board's requirements in accordance with the approved Definitive Plan.
  - c) Written certificate from a registered land surveyor of the Planning Board's choosing, that all permanent bounds and monuments on all street lines and on all lots within the subdivision are in place and accurately located in accordance with the approved Definitive Plan, and that the as-built plan submitted accurately reflects the conditions in the completed subdivision and are in compliance with the approved Definitive Plan.
  - d) Written certificate from a registered civil engineer of the Board's choosing that the streets, drainage, and stormwater management system shall have been in use through one (1) full year and shall have performed as designed.
  - e) Written confirmation from the head of the Highway Department that the road construction including paving and associated improvements have been exposed to one (1) full year without damage, or that damage, if incurred, has been repaired to the satisfaction of the Highway Department.
  - f) Written confirmation from the Tree Warden that installation of the street trees and other plantings required by the approved Definitive Plan have been completed satisfactorily and that damaged plantings have been replaced. A one (1) year warranty for trees and plantings shall be required.
  - g) The address of the applicant.
  - h) Two copies, plus one original mylar, one electronic PDF version, of an as-built plan of the streets and ways within the subdivision.
  - i) Written evidence that all fees to cover inspection for release of the restrictive covenant have been paid by the applicant.
- 2) If the Planning Board determines that said construction of installation has been completed, it shall release the interest of the Town in the restrictive covenant by execution of a "Lot Release – Certification of Performance."
- 3) If the planning Board determines that said construction of installation has not been completed in accordance with the approved Definitive Plan, it shall specify in a notice sent to the Town Clerk and, by registered mail, to the applicant, the details wherein said construction or installation fails to comply with the approved Definition Plan. Failure of the Planning Board to do so within 45 days after the receipt by the Town Clerk of the statement from the applicant requesting release of the Town's interests

will result in the termination of obligations under the restrictive covenant. In the event that said 45-day period expires without such specification by the Planning Board or without the release of the restrictive covenant as aforesaid, then the Town Clerk shall, upon request, issue a certificate to such effect, duly acknowledged, which may be recorded.

- 4) Even though all improvements covered by the restrictive covenant have been completed, the Planning Board may refuse to release the restrictive covenant if completion of construction on any remaining undeveloped or partially developed lot(s) poses a substantial risk or injury to the covered improvements.

2.6 Subdivision standards in the Floodplain. All subdivision proposals shall be reviewed to determine whether such proposals will be reasonably safe from flooding. If any part of a proposed subdivision is located within the Special Flood Hazard Area as defined by the Federal Insurance Administration (FIA) Flood Hazard Boundary Maps or within the 100-Year Floodplain as defined by the Federal Emergency Management Agency's Flood Insurance Rate (FIRM) maps, it shall be reviewed to assure compliance with the Town of Orange Zoning Bylaw and the following:

- A. The proposed subdivision design is consistent with the need to minimize flood damage.
- B. All public and private utilities and facilities, such as sewer, gas, electrical and water systems, shall be located and constructed to minimize or eliminate flood damage.
- C. Adequate drainage systems shall be provided to reduce exposure to flood hazards.
- D. Base flood elevation (the level of the one-hundred-year flood) data shall be provided for proposals greater than five (5) lots or five (5) acres, whichever is the lesser, for that portion within the Flood Hazard Area or the 100-Year Floodplain.

2.7 Development Impact Statement

- A. Contents. The board may require an Applicant of a subdivision to submit a Development Impact Statement (DIS) on the effects the proposed action has or will have on: 1) the immediate neighborhood and land area; 2) surrounding neighborhoods; and 3) the community at large.

The DIS shall contain detailed information describing the nature and extent of the proposed work and its potential impacts; any adverse short-term and long-term consequences which cannot be avoided should the work be performed; and all measures to be utilized to minimize adverse consequences, particularly environmental damage. The DIS shall include a detailed assessment of the probably impacts of the proposed action regarding environmental, fiscal, and socioeconomic elements and factors.

Environmental factors shall mean any destruction, damage, or impairment, actual or probable, to any natural resources within the Town and shall include but not be limited to water pollution, air pollution, sewage disposal, pesticide pollution, noise, impairment and eutrophication of rivers, streams, lakes, ponds, or other surface or subsurface water resources, destruction of wetlands, open spaces, natural areas, parks, or historic districts

and sites.

Fiscal and socioeconomic impacts shall mean the effect on traffic circulation within and outside of the subdivision, including the impacts on roads outside of the subdivision providing access to the subdivision road, safety, neighborhood character, school enrollment, public facilities, municipal and community services including fire and police protection, associated fiscal expenditures and revenues, and on housing and other development activity.

The DIS shall also develop, describe, and objectively weigh alternatives to the proposed development, which are allowed by the Zoning Bylaw.

- B. Procedure. On submission to the Board of a residential subdivision creating ten (10) lots or dwelling units and all nonresidential subdivisions, the applicant is required to submit a DIS (see Appendix B). The Board may require portions of the DIS to be carried out for smaller subdivisions, if in their opinion, the sensitivity of the land warrants an investigation. After a preliminary scoping session to be held between the applicant and the board or its agent, and upon submission of evidence and a written request from the applicant, the Board may waive any section(s) of the requirements that it deems non-applicable to the proposed project or may require additional information on any aspect of the requirements. The entire cost of the DIS will be the responsibility of the Applicant. The DIS shall be prepared by an interdisciplinary team of professionals qualified, experienced, and where applicable, licensed in their fields. Such team may include a civil engineer, traffic engineer, architect, landscape architect, land use planner, hydro-geologist, hydrologist, biologist, and other environmental professionals.

## 2.8 Open Space Development

- A. If the applicant wishes the subdivision to be treated as an Open Space Development (“OSD”), at either the preliminary plan stage or the definitive plan stage, the applicant, in addition to all other subdivision regulation requirements, must follow a prescribed design process and provide sufficient information on the environmental and open space resources found on the proposed project site to allow a conservation analysis.
- 1) At the time of the application for preliminary subdivision approval applicants will be required to demonstrate to the Planning Board that the following design process was utilized by a certified landscape architect to determine the site layout including proposed streets, lots, unit placement, and designation of all common areas and open space.
  - 2) Conservation Analysis: Identification of Conservation Areas and Potentially Developable Area
    - a) Primary Conservation Areas, such as wetlands, river front areas, and floodplains regulated by state or federal law, are to be identified and delineated. Development is prohibited within Primary Conservation Areas.
    - b) Secondary Conservation Areas including unprotected elements of the natural landscape such as steep slopes, upland buffers to wetlands, streams, and vernal

pools, mature woodlands, prime farmland, meadows, wildlife habitats including corridors for wildlife movement, and cultural features such as historic and archaeological sites and scenic views shall also be identified and delineated. Master and open space and recreation plan conservation goals are to be considered when delineating such conservation areas. Land outside identified Primary and Secondary Conservation Areas is the Potentially Developable Area.

- c) Conservation Areas and Potentially Developable Areas shall be delineated such that open space is contiguous to the extent feasible. Open space will still be considered contiguous if it is separated by a roadway with undeveloped frontage. The Planning Board may waive the contiguity requirement for all or part of the required open space where it is determined that allowing noncontiguous open space will promote the goals of the Open Space Development Bylaw and/or protect identified Primary and Secondary Conservation Areas.
- 3) The Planning Board, in consultation with the Conservation Commission shall study the conservation analysis, may conduct field visits, and shall formally determine which land should be preserved and where development may be located. As part of its decision the Planning Board shall make written findings supporting its determination (the "Conservation Findings"). These findings must provide a viable location for the number of units permitted by the Open Space Development Bylaw. Once the Potentially Developable Area has been determined the applicant shall layout the components of the subdivision within that area including the primary and any secondary roads, rights of way, trails, sidewalks, and other infrastructure as well as lot lines.
- 4) Standard for Approval: The Planning Board shall deny any application that does not include sufficient information to make Conservation Findings, that deviates from the requirements of the Open Space Development Bylaw, or that does not preserve land that the Planning Board determines should be preserved from development as a result of the conservation analysis. The Conservation Findings shall show land to be permanently preserved by a conservation restriction, and include recommended conservation uses, ownership, and management guidelines for such land. The Planning Board's Conservation Findings shall be incorporated into its decision to approve, approve with conditions, or deny an application. The Conservation Findings shall also indicate preferred locations for development if the proposed plan is denied based upon such findings.
- 5) The conservation analysis and findings process will not be used to directly or indirectly deny an OSD subdivision application or to make it technically or financially infeasible. The amount of developable land and the number of permitted dwelling units is set by the Open Space Development Bylaw and the Planning Board will, if reasonably possible, provide a viable location for the permitted number of dwelling units, taking into consideration the location of the dwelling units and open space relative to the whole property. The Planning Board anticipates that denials will be extremely rare and only occur if conditions cannot be applied sufficient to ensure that the subdivision conforms to the regulations.

- 6) OSD Design Standards: The following standards shall apply to all applications for subdivision under the Open Space Development Bylaw, and shall govern the design and development process:
  - a) Disturbed Areas: In order to maximize the amount and contiguity of preserved open space, and consistent with the Planning Board's Conservation Findings, every effort shall be made to minimize and concentrate the amount of disturbed area (defined as any land not left in its natural vegetated state), by minimizing tree and soil removal. Any grade changes shall be in keeping with the general appearance of the neighboring developed areas. The orientation of individual building sites shall maintain maximum natural topography and cover. Topography, tree cover, surface water buffers, and natural drainage ways shall be treated as fixed determinants of road and lot configuration rather than as malleable elements that can be changed to follow a preferred development scheme.
  - b) Ways: Streets shall be located and designed to maintain and preserve natural topography, significant landmarks, and trees; to minimize cut and fill; and to preserve and enhance views and vistas on or off the subject parcel. The Planning Board may modify the applicable road construction requirements for new roads within an Open Space Design as provided in the Subdivision Regulations if it finds that such modifications will be consistent with the purposes of this section, the Open Space Development Bylaw and the Master Plan.
  - c) Aesthetics: Development shall relate harmoniously to the terrain and the use, scale, and architecture of existing buildings in the vicinity that have functional or visual relationship to the proposed buildings. All open space (landscaped and usable) shall be designed to add to the visual amenities of the area by maximizing its visibility for persons passing the site or overlooking it from nearby properties.
  - d) Cultural Resources: The removal or disruption of historic, traditional or significant uses, structures, or architectural elements shall be minimized insofar as practicable, whether these exist on the site or on adjacent properties.
  - e) On-site Pedestrian and Bicycle Circulation: Walkways, trails and bicycle paths shall be provided to link residences with recreation facilities (including parkland and open space) and adjacent land uses where appropriate.
- 7) The application forms which are part of Appendix A of these Subdivision Regulations are hereby modified to add the option of applying for an Open Space Development subdivision.

### **SECTION III DESIGN STANDARDS**

Except as herein noted, the provisions of the following documents shall be used as design standards. Where a difference between the standards and these Regulations exists, these Regulations shall be followed unless a waiver is granted by the Planning Board:

- A. Streets, sidewalks, water systems, sanitary sewers, storm drain systems, public and private utilities and other infrastructure shall be constructed in accordance with the current edition of the Massachusetts Department of Transportation's "Standard Specifications for Highways and Bridges," ("Standard Specifications").
- B. Roads shall be designed in accordance with the current appropriate American Association of State Highway and Transportation Officials (AASHTO) design manual for 20 mile per hour design speed or a greater speed, if appropriate, as determined by the Planning Board.

### 3.1 Streets.

#### A. Location.

- 1) All streets in the subdivision shall be designed so that in the opinion of the Planning Board, they will provide safe vehicular travel. Due consideration shall also be given by the subdivider to the attractiveness of the street layout, in order to obtain the maximum livability and amenity of the subdivision. Common driveways shall not be used to provide vehicular access to lots within a subdivision if, in the opinion of the Planning Board, they are being used to circumvent the requirements of these Subdivision Regulations or the Zoning Bylaws.
- 2) The design and layout of the proposed subdivision shall conform, so far as is practicable, to the Development Guidelines contained in Appendix A and the LID Site Planning and Design checklist in Appendix B and to the Town Master Plan, in whole or in part, Open Space and Recreation Plan, or Community Development Plan, as adopted by the Planning Board or the Town.
- 3) Provision shall be made, which is satisfactory to the Planning Board, for the proper projection of streets or for access to adjoining property which is not yet subdivided or developed. A right-of-way from the end of all dead-end roads to an adjoining property must be part of the street layout and must be shown on the street acceptance plans. Such right-of-way shall provide for a future road or pedestrian path that will link future subdivisions unless there is compelling evidence that the adjoining property will never be developed as a subdivision.
- 4) Reserve strips prohibiting access to streets or to adjoining property shall not be permitted.
- 5) In those instances where the Board deems it necessary, sidewalks, grass strips and curbing shall be required.
- 6) Generally, it is preferred that new roads loop back to the existing road instead of being dead-end streets (see Dead-end streets below.)
- 7) Dead-end streets (cul-de-sac) shall be permitted as secondary or minor streets only. Dead-end streets shall not be longer than six hundred (600) feet unless, in the opinion of the Planning Board, a greater length is necessitated. Dead-end streets shall be provided at the closed end with a turnaround having an outside roadway diameter of

at least one hundred twenty-five (125) feet and a property line diameter of at least one hundred forty (140) feet.

**B. Alignment.**

- 1) Streets shall be laid out so as to intersect, as near as possible, at right (90°) angles. No street shall intersect another street at less than sixty degrees.
- 2) Streets entering on opposite sides of another street shall be laid out directly opposite each other or with a minimum offset of one hundred (150) feet between their respective center lines.
- 3) Minimum center-line radii will be as follows: major street, five hundred (500) feet and secondary street, three hundred (300) feet.
- 4) Property lines at street intersections shall be cut back to provide for curb radii of not less than thirty (30) feet.
- 5) At forty-five (45) inches above the pavement at the intersection of the subdivision road with the existing street, the minimum sight distances shall be as follows: major streets, three hundred fifty (350) feet and secondary streets, two hundred seventy-five (275) feet
- 6) Street jogs with center-line offsets of less than one hundred-fifty (150) feet should be avoided.

**C. Grade.** The maximum grades for streets shall be as follows: major street, six percent (6%); and secondary streets, eight percent(8%). Minor streets shall have a maximum grade of six percent (6%) if gravel or twelve percent (12%) if constructed of a hardened surface such as asphalt, concrete, or oil and stone.

**D. Width**

- 1) The minimum width of a right-of-way for a major or secondary street shall be fifty (50) feet. The minimum width of a minor street shall be thirty (30) feet. Greater width shall be required by the Planning Board when deemed necessary for present and future vehicular travel.
- 2) The minimum paved width of a major or secondary street shall be shall be twenty-four (24) feet. Minor streets shall be constructed with a minimum traveled way of fifteen (15) feet. Greater width shall be required by the Planning Board when deemed necessary for present and future vehicular travel or for parking.
- 3) The center line shall coincide with the center line of the right-of-way unless otherwise requested by the Board.
- 4) If serving more than two units a minor street will be called a “way” with a sign placed in plain view at its intersection with a major or secondary street or a public way.

- 5) Applicants who wish to establish minor streets in a subdivision shall provide:
  - (a) evidence of deeded covenants for all lots served by the minor street which include provisions that are adequate in the opinion of the Planning Board and Town Counsel to: (1) establish a maintenance association comprised of the owners of all lots served by the minor street; (2) ensure continued maintenance of the minor street surface and its drainage structures; (3) provide for the collection of dues and assessments for any necessary ongoing maintenance, repairs, and any plowing/sanding of the minor street; (4) provide a compliance mechanism enforceable by the maintenance association in the event of non-payment of dues or assessments by a member; (5) a plan signed by a registered professional engineer for the minor street showing alignments, grades, subsurface preparation, drainage facilities and surface materials.
- 6) Minor streets shall be designed to safely handle the proposed traffic and provide year-round access for emergency vehicles, and shall satisfy at least the regulations for driveways in the Town of Shelburne Zoning Bylaw. The Planning Board may require enhanced subsurface preparation, drainage, alignment, width, turnouts, and surfacing as long as the standards for the secondary road standards within the Subdivision Regulations are not exceeded. The Town of Shelburne shall not be compelled to provide construction, reconstruction, maintenance, snow plowing, school bus pick-up, police patrols, or other services along a shared driveway. Minor streets shall not become public ways. A shared driveway shall not exempt an application from meeting applicable parking requirements for individual dwelling units.

#### E. Adequate Access from Public Way

- 1) The street system within a subdivision shall have, in the opinion of the Planning Board, adequate vehicular, pedestrian, and/or bicycle access from a public way. The Planning Board shall require, as a condition of approval of a plan, that such adequate access be provided by the subdivider, and/or that the subdivider make physical improvement(s) of access to and within such a way, in accordance with the provisions for these Subdivision Regulations, from the boundary of the Subdivision to a public way.
- 2) Where the physical condition or width of a public way from which a subdivision has its access is considered by the Planning Board to be inadequate to either provide for emergency services or carry the traffic which is expected, in the opinion of the board, to be generated by such subdivision, the Planning Board shall require the subdivider to improve the physical condition of the road and to dedicate a strip of land for the purpose of widening the abutting public way to a width commensurate with that required within the subdivision or by these Subdivision Regulations. Any such dedication of land for the purpose of the way and any such work performed within such public way shall be made only with permission of the governmental agency having jurisdiction over such way, and all costs of any such widening or construction shall be born by the subdivider.
- 3) The Planning Board shall disapprove of a subdivision plan where, in the opinion of the Planning Board, the existing surrounding municipal infrastructure (e.g. street width and construction, sanitary sewer, public water, storm sewer, etc.) is insufficient

and/or incapable of handling the additional volumes (e.g. traffic, sewage, storm water, etc.) anticipated, by the Planning Board, to be generated by the project. The Planning Board may accept or require off-site improvements to mitigate any of these impacts.

### 3.2 Easements.

- A. Easements shall be at least twenty (20) feet in width.
- B. Where a subdivision is bisected by or adjacent to a watercourse, either natural or man-made, the Board may require that there be a stormwater or drainage easement of at least twenty (20) feet in width to conform to the path of the watercourse and to provide for any construction related to that watercourse.
- C. The Board may also require an easement at any place it deems necessary to protect the health and safety of the inhabitants of Shelburne.

### 3.3 Storm Drainage.

- A. The storm drainage system shall be designed to intercept all stormwater drainage from the particular subdivision or any additional runoff that may be created by that subdivision. Low Impact Development (LID) techniques, as outlined in Appendix B--Section VIII C, should be used whenever feasible to manage stormwater within the proposed subdivision. The stormwater drainage system must be in compliance with the MA Department of Environmental Protection's stormwater management regulations.
- B. The Rational Method or the methods described as TR-55 or TR-20, shall be used in determining the quantity of stormwater to be carried by the system. The system shall be designed for a minimum twenty-five (25) year Natural Resource Conservation Service (NCRS) design frequency storm. A one-hundred (100) year NRCS design frequency storm shall be used for all bridge openings and major culverts.
- C. Wherever possible, stormwater should be directed into the nearest part of the drainage system. Where storm drainage encroaches on privately owned land, a drainage easement shall be acquired by the developer.
- D. The storm drainage system shall be designed in accordance with all current regulations and standards of the Massachusetts Department Environmental Protection and the U.S. Environmental Protection Agency.
- E. Stormwater shall not be permitted to cross the surface of the roadway. It must be piped underneath or captured by swales.
- F. Catch basins, or other Low Impact Development (LID) techniques shall be placed in the subdivision as appropriate.
- G. The minimum diameter of storm drainage pipes shall be fifteen (15) inches.
- H. The method of construction and the materials used in construction shall conform to the most recent Massachusetts Highway Department "Standard Specifications for Highways

and Bridges”.

- I. No open water body or wetland shall be filled unless in compliance with the Massachusetts Wetlands Protection Act.
- J. Where a portion of a subdivision lies within an aquifer recharge area, storm drainage shall be directed, when appropriate, to retention basins in order to artificially recharge the groundwater or LID techniques shall be used to manage stormwater runoff. Stormwater may require pretreatment to meet water quality standards. The proposed drainage should incorporate Best Management Practices for managing stormwater according to DEP guidelines.
- K. Leaching catch basins may be required at the option of the Board. These basins shall be at least six (6) feet deep and four (4) feet in diameter (inside measurements), constructed of concrete blocks or precast concrete units. Leaching basins shall be backfilled for at least one (1) foot around all sides with one and one-half (1 ½) inches of washed stone, topped with peastone, and shall be cross-connected with a twelve-inch equalizer drainpipe. Covers on basins shall conform to Massachusetts Highway Department standards.
- L. Low Impact Development Techniques: see Appendix B-- Section VIII C. 4 a-l.
- M. All new culverts should be placed so as to maximize stream connectivity. Culvert specifications shall reflect the Massachusetts River and Stream Crossing Standards ([http://www.streamcontinuity.org/pdf\\_files/MA\\_Crossing\\_Std\\_3-1-06.pdf](http://www.streamcontinuity.org/pdf_files/MA_Crossing_Std_3-1-06.pdf)).
- N. Post construction stormwater runoff shall be no greater than preconstruction levels.
- O. The Planning Board will be open to appropriate waivers to the specific requirements of this section as long as the Planning Board, as advised by the Town’s consulting engineer, is convinced the proposal meets the standard in Section 3.3.A .

### 3.4 Water Supply and Sewage Disposal .

- A. No Definitive Plan shall be approved by the Planning Board unless evidence satisfactory to the Board is presented that adequate provision will be made for supply of water and disposal of sewage for each lot in the subdivision which is to be built upon.
- B. Any public system design shall be based upon the requirements of the Shelburne Falls Water District, or the Shelburne Sewer District, as determined by its location. Any private system design shall be based upon the requirements of the Board of Health, and in either case approved by them in writing prior to Planning Board approval of the Definitive Plan.
- C. In addition, a local water supply should be provided within the subdivision for fire fighting purposes as deemed necessary by the appropriate Fire Chief.

### 3.5 Open Spaces – The Planning Board may require the plan to show a park or parks suitably located for playground or recreation purposes or for providing light and air if not

unreasonable in area in relation to the area of the land being subdivided and the prospective uses of such land.

3.6 Protection of Natural or Cultural Features – Due regard shall be shown for all natural features, such as large trees, water courses, ridgelines, scenic points, historic spots, and similar community assets, which, if preserved, will add attractiveness and value to the subdivision.

3.7 Passive solar design -- In order to encourage energy conservation, and to allow for the maximum number of buildings to receive direct sunlight sufficient for the operation of solar energy systems, the following design techniques shall be considered when feasible:

- A. Building orientation. In order to take maximum advantage of the winter sun for heating, a building's longest plane should be positioned no more than 30 degrees off the east/west axis to the extent possible.
- B. Street and lot layout. Where no topographic or other constraints exist, streets shall have an east/west orientation to the greatest extent possible, preferably within 30 degrees of the east/west axis.

#### SECTION IV REQUIRED IMPROVEMENTS

The following improvements, to be constructed in accordance with current industry standards, shall be made by the developer without cost to the town. The Planning Board will be open to appropriate waivers to the specific requirements of this section based upon recommendations by the Town's consulting engineer.

4.1 Installation schedule. -- The improvements required herein must be installed to the satisfaction of the Planning Board or their duly appointed representative. A schedule for installations of improvements should be filed with the Board of Selectmen and the Planning Board. The Planning Board will provide the developer with checklists of required inspections. Failure to file such schedule, or otherwise to give adequate notice as to when improvements can be inspected, will significantly delay certification of such improvements and subsequent release of restrictive covenant.

4.2 Roadway Clearing.

- A. No clearing or excavating shall be started on any part of the street until the Tree Warden or other party designated by the Board of Selectmen has designated, in writing, those trees which are to remain in the tree belt. If the construction of a new subdivision road will impact a road designated as a local scenic road according to Chapter 40, Section 15C, review and approval by the Planning Board to cut or remove trees is required. Such trees to be preserved shall be protected during construction by fenders or boxes, and their root systems shall be disturbed as little as possible.
- B. No matter such as stumps, trunks, limbs of trees, brush, boulders or such material shall be buried or left within the limits of the right-of-way lines.

### 4.3 Foundation of Roadway.

#### A. Subbase.

- 1) Within the roadway area, including driveway aprons, sidewalks and grass strips, all material shall be removed to subgrade, and any unsuitable material below subgrade, in the opinion of the town-appointed engineer, shall be removed and shall be replaced with proper bank run gravel and brought to proper compaction. The depth of the subgrade will be governed by existing conditions and shall be as specified by the town-appointed engineer. Geotextile fabric (MIRAFI 600 or equivalent) will be required where the subbase is not suitable as determined by the Shelburne Highway Superintendent or the town-appointed engineer.
- 2) Where fill is required, it shall be placed in uniform lift layers not deeper than eight (8) inches and shall be spread uniformly with the large stones at the bottom.
- 3) Any gravel used as fill in the subbase shall be composed of hard, durable stone and coarse sand, practically free from loam and clay and containing no stone having a dimension greater than six (6) inches, and, when spread and compacted, shall present a stable foundation.
- 4) Each layer shall be thoroughly compacted to AASHTO (American Association of State Highway and Transportation Officials) standards and rolling shall continue until a firm, even surface true to line and grade is achieved. Any depressions shall be filled and rerolled, and any soft or unsuitable areas shall be removed and replaced with suitable material and rolled.
- 5) The subgrade shall be shaped and finish graded at the required depth below and parallel to the proposed pavement surface, in conformance with the typical street cross section.
- 6) Inspections shall be required after completion of the *subbase* (AASHTO).

#### B. Gravel base.

- 1) The gravel base course shall consist of not less than eighteen (18) inches of well-compacted gravel placed upon the subbase, for the entire width of the roadway, in layers not greater than six (6) inches deep.
- 2) When spreading the gravel, care should be taken to rake forward and distribute the largest stones so they will be at the bottom of the gravel base course and evenly distributed.
- 3) Each layer shall be thoroughly compacted to the proper density, and rolling shall continue until a firm, even surface true to line and grade is achieved. Any depression that appears during or after rolling shall be filled with gravel and rerolled.
- 4) The gravel used in the base course shall conform to the AASHTO standards except that it shall contain no stones having a dimension greater than four (4) inches. The

- top three (3) inches of gravel shall be screened or crushed with a maximum stone size of one (1) inch.
- 5) The gravel base surface shall be shaped and finish graded at the required depth below and parallel to the proposed pavement surface, in conformance with the typical street cross section.
  - 6) Extreme care shall be taken to ensure that all trenches for utilities have been thoroughly compacted to prevent future settling. Subdrains shall be installed if necessary.
  - 7) Inspections shall be required before commencement and after completion of the gravel base (AASHTO).

#### 4.4 Surfacing of roadway.

- A. The roadway and driveway aprons shall be paved the entire width, including under the berms, and the surface treatment shall be compacted bituminous concrete placed in two (2) layers.
- B. The first layer or binder course shall be Class I bituminous concrete pavement, Type I-1, binder course mix, laid at a thickness of two (2) [two and one-half inches (2-1/2)] inches, in accordance with Massachusetts Department of Transportation's "Standard Specifications for Highways and Bridges", latest edition.
- C. The second layer or surface course shall be Class I bituminous concrete pavement, Type I-1, top course mix, laid at a thickness of two (2) inches, in accordance with Section 460 of the Massachusetts Department of Transportation's "Standard Specifications for Highways and Bridges", latest edition.
- D. The plant mix material shall be delivered to the site in a hot and easily workable condition when weather conditions are satisfactory so that it can be properly placed on the appropriate base. Irregularities in the existing foundation material shall be eliminated by the use of extra bituminous material, in accordance with Section 460 of Massachusetts Department of Transportation's "Standard Specifications for Highways and Bridges", latest edition.
- E. All bituminous concrete shall be spread by an approved mechanical spreader in a uniformly loose layer to the full width required and to such thickness that each course, when compacted, shall have the required thickness and shall conform to grade and the typical street cross section. Hand spreading of bituminous concrete material will be allowed only for special areas which do not permit mechanical spreading and finishing.
- F. Each course of bituminous material shall be rolled with a self-propelled, equally balanced, tandem roller weighing not less than five (5) nor more than ten (10) tons. Places inaccessible to the power roller shall be compacted by means of hand or vibratory tampers. Any displacement caused by the roller shall be corrected by raking and adding fresh mixture where required.

- G. Traverse joints shall be formed by laying and rolling against a form of the thickness of the compacted mixture placed across the entire width of the pavement. When the laying of the mixture is resumed, the exposed edge of the joint shall be painted with a thin coat of hot asphalt or asphalt cement thinned with naphtha. The fresh mixture shall be raked against the joint and thoroughly tamped with hot tampers and rolled.
- H. The final bituminous surface shall show no deviation greater than one-fourth (1/4) inch when tested with a sixteen-foot straightedge placed parallel to the center line of the surface course.
- I. Finished roadway and driveway apron surfaces less than the required thickness or containing any soft or imperfect places will not be approved.
- J. All roadways shall be brought up to the finish grade as shown on the definitive plan, and all manhole covers, gate boxes, gas drips and other access to underground utilities shall be set flush with the surface of the road, grass strip or sidewalk.
- K. Inspections shall be required upon completion of the binder and surface courses (AASHTO).

4.5 Curbs and Berms – Curbs and berms shall be constructed as appropriate based on the stormwater system and sidewalks required by the Planning Board.

4.6 Sidewalks.

- A. Sidewalk of not less than five (5) feet in width shall be constructed on one (1) or both sides of the street starting at the property line when, in the opinion of the Board, such sidewalks are necessary.
- B. Sidewalk construction shall meet requirements set forth by the Massachusetts Highway Department latest volume of Standard Specifications for Highways and Bridges and Massachusetts Architectural Access Board and Americans with Disabilities Act standards.

4.7 Grass Areas – All cleared areas of a right-of-way not to be planted with ground-cover plantings, including all disturbed areas over all culverts in drainage easements, shall be loamed with not less than six (6) inches' compacted depth of good quality loam and seeded with a Standard Conservation mix or a mix designed for slope stabilization areas. Seeding shall be done at appropriate times of the year and in a manner to ensure growth of grass. No transformers, signs or similar items shall be placed within the grass plot within three (3) feet of the edge of the pavement.

4.8 Street signs – Street name signs of a design conforming to the type in general use in the town shall be furnished, set in concrete and erected at all street intersections under the direct supervision of the Highway Superintendent, prior to the occupancy of any house on the street.

4.9 Street lighting – Pedestrian street lighting shall be installed along any street the Board deems appropriate. Light standards to be used shall be subject to the approval of the

Planning Board and, when used, be spaced no less than every five hundred (500) feet. Streetlighting shall be designed to avoid unnecessary glare or light pollution.

#### 4.10 Monuments and markers

- A. Monuments shall be installed at all street intersections and at all points where, in the opinion of the Board, permanent monuments are necessary. Such monuments shall conform to the standard specifications of the Highway Superintendent and shall be set according to such specifications.
- B. Iron rods or other markers suitable to the Board shall be installed at every corner of each lot within the subdivision. Their locations shall be noted on the definitive plan.
- C. No permanent monument or marker shall be installed until all construction which would disturb or destroy the monument or maker is completed.
- D. All monuments and markers shall be installed before the restrictive covenant is released.

#### 4.11 Trees and planting

- A. The applicant shall submit a landscape plan showing existing and proposed street trees and other plantings.
- B. All landscaping and planting within the rights-of-way will come under the supervision of the Tree Warden or other party designated by the Select Board. Trees should be planted in locations, which avoid overhead or underground utilities. Trees not to be planted include all species of willow, catalpa and poplar and species considered non-native invasives.
- C. Inspections shall be required after the installation of street trees and landscaping.

#### 4.12 Utilities

- A. Underground Utilities. All electrical, data, telephone, gas lines, fire alarm and other wires and cables shall be installed underground. If located within a flood-prone area, as determined by the Board, transformers, switching equipment or other vital components shall be flood proofed and approved by the Board or a Board-appointed engineer at the subdivider's expense.
- B. Water. A complete water system, including fire hydrants, shall be installed to the specifications of the Shelburne Falls Fire District, if the project is within the boundaries of this district. Each lot shall be laid out and each residence shall be constructed so as to allow for a required sprinkler system. Outside of the district, an appropriately sized underground storage tank in addition to the sprinkler system in each residence may be required.
- C. Sewerage (where applicable). A complete sewerage system shall be installed according to the specifications of the Board of Health and, if appropriate, the Shelburne Sewer District.

- 4.13 As Built Plans. After final approval of all the roadways, utilities, stormwater drainage facilities, landscaping and any other improvements required by the Definitive Plan in the subdivision and before the final release of the restrictive covenant, the applicant shall furnish the Planning Board with three (3) complete sets of as-built plans, certified by a registered professional engineer, which shall indicate that streets, storm drains, sewers, water mains and their appurtenances, and any other improvements required by the Definitive Subdivision Plan have been constructed in accordance with the Definitive Plan and are accurately located as shown upon the as-built plans. The location of all underground electric, telephone, and gas lines shall also be indicated on the as-built plans.
- 4.14 Final Cleanup. After completion of construction and before release of the restrictive covenant, the subdivider shall remove all temporary structures, debris, surplus materials and rubbish and shall otherwise leave the area in a neat and orderly appearance. Burning of the rubbish and waste material is prohibited.
- 4.15 Ownership of Streets. The Subdivider and the homeowner's association shall retain title to the fee of each street, road, way or walkway in the subdivision. The Planning Board shall require in its subdivision approval that the homeowner's association will never ask the Town of Shelburne to accept the road in the subdivision.
- 4.16 Engineering Cost. The Subdivider shall reimburse the Planning Board for the cost of all necessary engineering assistance obtained by the Board for Definitive Plan review, work supervision, and final inspection of the subdivision exclusive of any costs imposed by other boards or agencies. The restrictive covenant shall not be released prior to receipt of such reimbursement.

## SECTION V ADMINISTRATION

### 5.1 Inspection.

#### A. General requirements.

- 1) Inspections shall be carried out at appropriate times during the development of the subdivision when the following stages of progress have been reached.
- 2) Before clearing and grubbing, the Tree Warden, or a party designated by the Select Board, shall designate those trees which are to be preserved in the tree belt.
- 3) The roadway shall be inspected at the stages of subbase, gravel base, binder course and surface course.
- 4) The sanitary and storm drainage systems before the filling of utility trenches.
- 5) The water system and related accessories shall be inspected in accordance with the rules of the Shelburne Board of Health and the MA Department of Environmental Protection.

- 6) Sidewalks shall be inspected upon completion of the subbase, permanent binder and finish courses.
  - 7) Curbs, loaming and seeding operations may also be inspected by a Board-appointed engineer.
  - 8) At the completion of all improvements in the subdivision, the Board-appointed engineer shall make an inspection before final release of the restrictive covenant.
- B. A qualified engineer or surveyor chosen by the Planning Board shall carry out such inspections on behalf of the town. The subdivider shall give the proper inspector at least forty-eight (48) hours notice of the proper time for inspection.
  - C. Construction of streets and installation of utilities may be phased, provided that each section shall not be less than five hundred (500) feet in length; the lots within each completed section have complete access to the street upon which the lot fronts and to all utilities including water, sewer/septic, and electricity.
  - D. Inspection costs shall be borne by the subdivider, and shall be paid to the satisfaction of the Board before final release of the restrictive covenant.
  - E. Each specified construction stage should be completed to the satisfaction of the inspector, in writing, before further work will be done. Further work performed without this approval will result in returning the construction to the status necessary to perform the required inspection.
  - F. The developer has the responsibilities to ensure that the approved construction plans are implemented and construction qualities are met. All materials must conform to the current Massachusetts Department of Transportation "Standards and specifications for roads and bridges" and all construction must be completed in accordance with current accepted industry standards. Surveillance and field revisions by town officials and inspectors cannot be construed as fulfilling this responsibility.
  - G. No building or structure shall be erected within a subdivision without permission from the Building Inspector.

5.2 Waiver of Compliance. Strict compliance with the requirements of these rules and regulations may be waived when, in the judgment of the Board, such action is in the public interest and not inconsistent with the Subdivision Control Law.

5.3 Fees

- A. Expenses for advertising, notices, inspections and professional review will be borne by the applicant.
- B. As provided by M.G.L. Ch. 44 §53G, the Shelburne Planning Board may impose reasonable fees for the employment of outside consultants, engaged by the Planning Board, for specific expert services. Such services shall be deemed necessary by the Planning Board to come to a final decision on an application submitted to the Planning

Board pursuant to the requirement of: The Town of Shelburne Zoning Bylaws, Town of Shelburne Subdivision Regulations, or any other state or municipal statute, bylaw or regulation, as they may be amended or enacted from time to time. The Planning Board may also impose fees for other consultant services for the review of the plans, survey or inspections under any of the above-referenced laws or regulations.

- 5.4 Special Account. Funds received pursuant to these rules shall be deposited with the town treasurer who shall establish a special account for this purpose. Expenditures from this special account may be made at the direction of the Planning Board without further appropriation as provided in G.L. Ch. 44 §53G. Expenditures from this account shall be made only in connection with a specific project or projects for which a consultant fee has been collected from the applicant. Expenditures of accrued interest may also be made for these purposes.
- 5.5 Consultant Services. In hiring outside consultants, the Planning Board may engage professional engineers, planners, landscape architects, wildlife scientists, lawyers, designers, or other appropriate professionals able to assist the Planning Board and to ensure compliance with all relevant laws, ordinances, bylaws and regulations. Specific consultant services may include but are not limited to analysis of applications, title searches, mapping of lot and/or municipal boundaries and/or right of way, and environmental or land use law. Services may also include on-site monitoring during construction, or other services related to the project deemed necessary by the Planning Board. The consultant shall be chosen by, and report only to, the Planning Board and/or its administrator.
- 5.6 Higher standard to govern. Whenever these rules and regulations made under the authority hereof differ from those prescribed by any local bylaw or other local regulation, the provision which imposes the greater restriction or the higher standard shall govern.
- 5.7 Statutory rules and regulations. For matters not covered by these rules and regulations, reference is made to Sec. 81-K to 81-GG, Ch. 41 M.G.L., inclusive.
- 5.8 Severability. The invalidity of any of the foregoing rules, regulations and requirements shall not affect the validity of the remainder. Any part of these regulations subsequently invalidated by a new commonwealth law or modification of an existing commonwealth law shall automatically be brought into conformity with the new or amended law and shall be deemed to be effective immediately.

**LIST OF APPENDICES**

**APPENDIX A – FORMS**

|            |  |
|------------|--|
| Form A     | Application for Endorsement of Approval Not Required Plan  |
| Form B     | Application for Preliminary Subdivision Plan   |
| Form B1    | Certificate of Decision on Preliminary Plan  |
| Form C     | Application for Approval of Definitive Subdivision   |
| Form C1    | Certificate of Decision on Definitive Subdivision  |
| Form C2    | For Failure of the Planning Board to Take Timely Final Action on a Definitive Subdivision Plan: Certificate of Constructive Approval |
| Form C3    | Certified List of Abutters   |
| Form C4    | Notice of Public Hearing for Consideration of Definitive Subdivision Plan  |
| Form D     | Designer’s Certificate   |
| Form E     | Notice of Public Hearing   |
| Form F     | Covenant   |
| Form F1    | Assent of Mortgagee  |
| Form G     | Agreement to Secure Performance by a Deposit of Money  |
| Form H     | Surety Agreement for a Bond  |
| Form I     | Agreement to Secure Performance by a Deposit of Negotiable Securities (Bonds, Stocks, Public Securities)                             |
| Form J     | Lender’s Agreement   |
| Form K     | Easements  |
| Form K1    | Deeds  |
| Form L     | Referral and Review Form   |
| Form M     | Subdivision Plan Processing  |
| Form M1    | Construction Inspection Checklist  |
| Form N     | Certificate of Completion and Release of Restrictive covenant  |
| Form O     | Maintenance Bond – Surety Company  |
| Form P     | Maintenance Bond – Secured by Deposit  |
| Form Q     | Board of Health Receipt for Subdivision Plan   |
| Schedule A |  |

**APPENDIX B – DEVELOPMENT IMPACT STATEMENT**

**APPENDIX C – PLANNING BOARD FEE SCHEDULEE**

**APPENDIX D – DEVELOPMENT GUIDELINES BY LANDSCAPE TYPE**

**APPENDIX E – LOW IMPACT DEVELOPMENT (LID) SITE PLANNING AND DESIGN CHECKLIST**

APPENDIX A

FORMS

**PLEASE SEE SEPARATE PACKAGE OF FORMS AVAILABLE FROM THE  
PLANNING BOARD OR TOWN CLERK**

APPENDIX B

**DEVELOPMENT IMPACT STATEMENT**

In accordance with Section 2.5 of the Town of Shelburne’s Subdivision Rules and Regulations, the Applicant shall submit, at the request of the Planning Board, a Development Impact Statement (DIS).

It is an Applicant’s responsibility to prepare and document the DIS in sufficient detail to permit an adequate evaluation by the Planning Board; however the Board may request in writing additional data. It is necessary to respond to all sections of the DIS except when the Board grants a written exemption.

The Board may waive any section(s) of the requirements when, in their opinion, and upon submission of evidence from the Applicant, the requirements are non-applicable to the proposed project.

The entire cost of the DIS shall be the responsibility of the Applicant.

---

Name of Project \_\_\_\_\_

Date of Submission \_\_\_\_\_

Location of Project \_\_\_\_\_

Name(s) of Applicant(s) and Owner(s), if different \_\_\_\_\_

Address(s) and Telephone Number(s) \_\_\_\_\_

Name of Individual(s) preparing this DIS \_\_\_\_\_

Address(s) and Telephone Number(s): \_\_\_\_\_

Professional Credentials \_\_\_\_\_

**I. PROJECT DESCRIPTION**

- A. Describe the project including the number of lots; the number and type of dwelling units (e.g., single family, two family, condominium or apartment); the number of buildings and the number of dwelling units per building, if appropriate; number of bedrooms; number and square footage of buildings and the number of parking spaces if not residential; and approximate price (rent or purchase as appropriate) per dwelling unit or per square foot if not residential.

**II. EXISTING BASELINE CONDITIONS**

- A. Describe the site’s topography, predominate soil types and characteristics (particularly related to drainage), and significant geological features. Indicate approximate percentages of the site covered by various soil types and slopes (e.g., 0 – 3%, 3-8%, 8-15%, and greater than 15%).
- B. Describe the site’s total acreage. Give approximate acreage of existing land use(s) including developed areas identifying separately significant uses such as roads, residential, commercial, and industrial uses. Give the approximate acreage of the undeveloped areas identifying separately significant uses such as farmland, flood plain, forested, wetlands, and surface waters.
- B. Describe any part of the site located in an area or in close proximity to an area or location that is of special concern or of special interest. Map areas such as water supply protection district, historic district or site, distinctive rock formation, trees larger than 30 inches in diameter at breast height, high or significant hazard dams, priority habitat areas, wetlands, vernal pool. If yes, please describe.

**III. NATURAL RESOURCES**

- A. Land
  - 1. Describe the potential and probable impacts of the proposed development on the existing baseline conditions, described in Section II above.
  - 2. Describe any limitations on the proposed project caused by subsurface conditions, and the methods to be used to address those limitations.
  - 3. Describe procedures and findings of percolation tests conducted on the site.
  - 4. Give the approximate acreage of land that will be permanently affected by construction of the proposed project (identifying separately significant uses such as roads, residential, commercial and industrial).

5. Describe proposed rough grading plans and highlight the differences between the existing topography and the rough grading plans.

**B. Air**

1. Describe possible sources and duration of significant amounts of odors, smoke and dust.
2. Describe precaution to be taken to eliminate or minimize the adverse environmental effects of the smoke, dust or odors generated.
3. Describe the relationship of the location of the proposed project and prevailing wind patterns to nearby residences, businesses, recreation areas, and other public areas.
4. If incineration of any kind is proposed for the proposed project, describe the effects resultant emissions will have on air quality in the area. Include proof that the anticipated incineration will comply with the latest local and state standards.

**IV. WATER AND WETLANDS**

- A. Evaluate how and to what extent the project will affect any protected resource areas as defined in M.G.L. Chapter 131, Section 40.
- B. Discuss compliance with Massachusetts DEP Stormwater Management Guidelines and directives.
- C. Evaluate how and to what extent the project will affect the quality and quantity of any existing or potential public or private water supplies, reservoirs and groundwater.
- D. Describe the methods to be used during construction to control erosion, sedimentation and siltation including use of sediment basins, mulching, matting, or temporary vegetation; approximate size and location of land to be cleared at any given time and length of time to stabilization; covering of soil stockpiles; and other control methods used. Evaluate effectiveness of proposed methods on the site and the surrounding areas.
- E. Describe the permanent methods to be used to control erosion and sedimentation. Include descriptions of:
  1. Any areas subject to flooding or ponding;
  2. Proposed surface drainage system;
  3. Proposed land grading and permanent vegetation cover;
  4. Methods to be used to protect existing vegetation;
  5. The relationship of the development to the topography;
  6. Any proposed alterations of shorelines, marshes or seasonal wet areas;
  7. Estimated increase of peak runoff caused by altered surface conditions, and methods to be used to return water to the soils.
- F. Discuss proposed compliance with the EPA permit program for sedimentation control as well as the probability that the project will increase pollution or turbidity levels within

- receiving waterway and the precautions to be taken to minimize the effects.
- G. Discuss the project's effect on the waterway's aquatic biota and use as habitats.
  - H. Discuss the project's effects on groundwater quality and supply and efforts to recharge groundwater supplies.
  - I. Discuss what effect the project will have on increasing the incidence of flooding, including areas outside the subdivision.
  - J. Discuss the effect of the proposed sewage disposal methods on surface and groundwater supplies and quality.
  - K. Discuss the effect of the project on Estimated Rare Species Habitat Areas including Natural Communities as defined by the Massachusetts Natural Heritage Endangered Species Program (see VI-C below).
  - L. Discuss the location of the project area in relation to the inundation areas of any upstream high or significant hazard dams.

V. NOISE

- A. Describe the time, duration and types of noises generated by the project (including traffic generated from the development), both during and after construction.
- B. Discuss what effect these noises will have on both humans and wildlife.
- C. Describe the controls, which will be used to eliminate or minimize the effects of these noises.

VI. LOCAL FLORA AND FAUNA

- A. Discuss the project's effects on land-based ecosystems, such as the indigenous wildlife, stream bank cover, and vegetal or wooded growth.
- A. Describe proposed types and amounts of vegetal cover.
- B. Map and describe any rare plant, wildlife or fish species in the project area including those identified by the Massachusetts Natural Heritage and Endangered Species Program.

VII. BUILT ENVIRONMENT

- A. Land Use
  - 1. Describe how the project conforms with the growth plans for the area and the Town, in general.

2. Describe the project's compatibility with adjacent or nearby existing land uses, and private development plans, if known, for adjacent or nearby areas.
3. Describe any existing or proposed public or common recreational or open areas within the subdivision.
4. Discuss the site's proximity to transportation, shopping, educational facilities, recreational facilities, etc.

**B. Density**

1. Provide a tabulation of proposed buildings by type, size (number of bedrooms, floor area), ground coverage, and a summary showing the percentage of the tract to be occupied by buildings, parking and other impervious areas, and usable open space.

**C. Zoning**

1. Indicate the zoning designations for the site and adjacent areas. Discuss the need for a dimensional variance or special permit, if applicable.

**D. Architecture**

1. Describe the architectural style of the proposed buildings, including the type of materials to be used, the heights of the structures in relation to the surrounding area, and the landscaping techniques to be used.
2. Describe the location of common areas and service facilities (laundry, trash, garbage disposal) and discuss the visual impact of both.
3. Discuss the project's overall visual impact in relation to the surrounding area and possible interference with natural views.

**E. Historic Buildings, Historic Sites and Archaeological Sites**

1. Map the location and explain the significance of any historic buildings or sites on or adjacent to the project.

**VIII. PUBLIC FACILITIES**

**A. Water Supply, Flow, Pressure and Distribution**

1. Describe the groundwater and/or surface water supply to be used.
2. Identify where the connection(s) to the Shelburne Falls Fire District (SFFD) distribution system is or are proposed, if appropriate.
3. Quantify the demands of the project for consumption and fire protection and describe the impact of such demand on the SFFD's water supply and distribution system.
4. Analyze the availability of adequate flow and pressure through the SFFD's water distribution system to the proposed project site.

**B. Sanitary Wastewater Connection, Collection and Facilities**

1. Identify the quantity and type of wastewater which will be generated by the project.
2. Describe the proposed sewage system and identify where the connection(s) to the municipal collection system is/are proposed.

3. Quantify the average and peak daily flow rates and describe the impact of such disposal on the municipal wastewater collection and treatment system or ground water.
- C. Storm Drainage Facilities/Low Impact Development Techniques Employed
1. Describe the proposed on-site storm drainage system and identify where the connection(s) to the municipal system is or are proposed.
  2. Provide drainage calculations that prove compliance with Massachusetts DEP Stormwater Management Guidelines for “Best Management Practice”.
  3. Describe provisions for maintaining those parts of the system that will not become part of the municipal system.
  4. Describe inclusion of proposed low impact development measures including:
    - a. Site Planning Process: The site planning process shall be documented and shall include the following steps: 1) identify and map critical environmental resources, 2) delineate potential building envelopes avoiding environmental resource areas and appropriate buffers, 3) develop methods to minimize impervious surfaces, and to protect and preserve open space.
    - b. No Untreated Discharges: All stormwater runoff generated from land development and land use conversion activities shall not discharge untreated stormwater runoff directly to a wetland, local water body, municipal drainage system, or abutting property, without adequate treatment.
    - c. Channel Protection: Protection of channels from bank and bed erosion and degradation shall be provided by attenuating the 24-hour extended detention storage of runoff of the post-development 1-year, 24-hour return frequency storm event or controlling the peak discharge rate from the 2-yr storm event to the pre-development rate as required by the MA DEP LID Management Policy.
    - d. Overbank Flooding Protection: Protection of channels from bank and bed erosion and degradation shall be provided by attenuating the 24-hour extended detention storage of runoff of the post-development 1-year, 24-hour return frequency storm event or controlling the peak discharge rate from the 2-yr storm event to the pre-development rate as required by the MA DEP LID Management Policy.
    - e. Downstream overbank flood and property protection shall be provided by attenuating the post-development peak discharge rate to the pre-development rate for the 10-year, 24-hour return frequency storm event as required by the MA DEP LID Management Policy.
    - f. Extreme Flooding Protection: Extreme flooding and public safety protection shall be provided by (1) attenuating the peak discharge rate from the 100-yr, 24-hour return frequency storm event to the predevelopment rates or (2) controlling and safely conveying the 100-year, 24 hour return frequency storm event such that flooding is not exacerbated or (3) evaluating the 100-year, 24-hour return frequency storm event to demonstrate no increased flooding impacts off-site, as required by the MA DEP LID Management Policy.
    - g. Recharge: a) Annual groundwater recharge rates shall be maintained, by promoting infiltration and recharge through the use of structural

- and non-structural methods. At a minimum, annual recharge from the post development site shall equal the annual recharge from pre-development site conditions. b) The stormwater runoff volume to be recharged to groundwater should be determined using the methods prescribed in the latest version of the Massachusetts DEP Stormwater Management Manual or an equivalent qualifying local manual.
- h. Structural Practices for Water Quality: Presumed Compliance with Massachusetts Water Quality Standards. All structural stormwater management facilities shall be selected and designed using the appropriate criteria from the most recent version of the Massachusetts DEP Stormwater Management Manual. For other structural stormwater controls not included in the Massachusetts Stormwater Management Manual, structural best management practices (BMPs) must be designed to remove 80% of the average annual post development total suspended solids (TSS) and 40% for total phosphorus [TP], and [30%] for total nitrogen (TN). It is presumed that a BMP complies with this performance goal if it is: a) Sized to capture the prescribed water quality volume; b) Designed according to the specific performance criteria outlined in the Massachusetts Stormwater Management Manual or an approved local equivalent; c) Constructed properly; and d) Maintained regularly.
- i. Water Quality Volume: The prescribed water quality volume required in the sizing of a structural stormwater practice shall be calculated as  $1.2 \times \text{total watershed area} \times \text{runoff coefficient (Rv)}$ , where  $Rv = 0.05 + 0.009 (I\%)$  and  $I\% = \text{percent of impervious area or } 0.50 \text{ inches} \times \text{the total impervious area of the drainage area and } 1.0 \text{ inches} \times \text{the total impervious area of the drainage area in critical areas, as specified in the Massachusetts DEP Stormwater Policy.}$
- j. Hydrologic Basis for Design of Structural Practices: For facility sizing criteria, the basis for hydrologic and hydraulic evaluation of development sites are as follows:
- i. Impervious cover is measured from the site plan and includes any material or structure on or above the ground that prevents water from infiltrating through the underlying soil. Impervious surface is defined to include, without limitation: paved parking lots, sidewalks, roof tops, driveways, patios, and paved, gravel and compacted dirt surfaced roads.
  - ii. Off-site areas shall be assessed based on their “pre-developed condition” for computing the water quality volume (i.e. treatment of only on-site areas is required). However, if an offsite area drains to a proposed BMP, flow from that area must be accounted for in the sizing of a specific practice.
  - iii. Off-site areas draining to a proposed facility should be modeled as “present condition” for peak-flow attenuation requirements.
  - iv. The length of sheet flow used in time of concentration calculations is limited to no more than 50 feet for

- predevelopment conditions and 50 feet for post development conditions.
- v. Detention time for the one-year storm is defined as the center of mass of the inflow hydrograph and the center of mass of the outflow hydrograph.
  - vi. The models TR-55 and TR-20 (or approved equivalent) will be used for determining peak discharge rates.
  - vii. The standard for characterizing pre-development land use for on-site areas shall be woods.
  - viii. For purposes of computing runoff, all pervious lands in the site shall be assumed prior to development to be in “good hydrologic condition” regardless of conditions existing at the time of computation.
  - ix. If an off-site area drains to a facility, off-site areas should be modeled, assuming an “ultimate buildout condition” upstream for assessment of 100-year flows for sizing of spillways.
  - x. Flooding and channel erosion impacts to receiving streams due to land development projects shall be determined at each point of discharge from the development project and such determination shall include any runoff from the balance of the watershed which also contributes to that point of discharge.
  - xi. The specified design storms shall be defined as a 24-hour storm using the rainfall distribution recommended by the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) or the Northeast Regional Climate Center “Atlas of Precipitation Extremes for the Northeastern United State and Southeastern Canada.”
  - xii. Proposed residential, commercial, or industrial subdivisions shall apply these Stormwater Management criteria to the land development as a whole. Individual lots in new subdivisions shall not be considered separate land development projects, but rather the entire subdivision shall be considered a single land development project. Hydrologic parameters shall reflect the ultimate land development and shall be used in all engineering calculations.
- k. Sensitive Areas: Stormwater discharges to critical areas with sensitive resources (i.e., mussel beds, swimming beaches, aquifer recharge areas, water supply reservoirs) may be subject to additional criteria, or may need to utilize or restrict certain LID Management practices at the discretion of the Planning Board. The Planning Board may designate sensitive areas and specific criteria for these areas after conducting a public hearing.
- l. Hotspots: Stormwater discharges from land uses or activities with higher potential pollutant loadings, known as “hotspots,” as defined in the most recent version of the MA DEP Stormwater Management

Manual—requiring the use of infiltration practices without pretreatment is prohibited.

D. Disposition of Stormwater

1. Indicate the location of any and all proposed outfalls.
2. Describe the effect of the outfalls and their discharge on the receiving waters, i.e., increased flows, pollution, etc.
3. Discuss the quantity of stormwater to be discharged.

E. Refuse Disposal

1. Estimate the quantity and types of refuse that will be generated by the project.
2. Describe the proposed methods of refuse disposal.

F. Traffic Facilities

1. Discuss the expected impact of traffic generated by the proposed development on area roadways. Discussion shall include existing average and peak traffic volumes and composition, projected average and peak traffic generation and composition, intersection impacts and analysis of area roadway and intersection capacities. Methodologies used to make projections shall be included. At a minimum, the analysis should include:
  - a. The existing Level of Service (LOS – see definition below) of relevant road systems including quantitative and qualitative measurements of operational factors including speed, travel delay, freedom to maneuver and safety;
  - b. The expected change in the condition of relevant road systems as a result of the proposed development;
  - c. The comparison on a per acre basis of the total vehicular traffic generation from the proposed development with:
    - i. The existing and potential vehicular traffic generation from all other developments accessing relevant road systems; and,
    - ii. The vehicular traffic generation which would be expected to produce a LOS below LOS “C”.
  - d. In determining the impact of vehicular traffic generation from a development, the following standards and definitions shall be used (unless the Applicant demonstrates to the Board that given the nature of the proposed project or applicable road systems, other standards are appropriate):
    - i. Trip generation rates for land uses as listed in the most recent update of Trip Generations, Institute of Transportation Engineers, Washington D.C.
    - ii. Levels of Service (LOS) as used by traffic engineers to define the various operating conditions that occur on a roadway or intersection when accommodating various traffic volumes. Although LOS is a qualitative measure of traffic flow, it is an acceptable measurement for determining overall impact of development on roadway networks. LOS “A” is associated with relatively freeflow

and average overall traffic speed in excess of thirty (30) miles per hour. LOS “B” represents stable flow with minor delays and speeds of 25 miles per hour or greater. LOS “C” corresponds to the design capacity of a road system and indicates stable flow with delays, and speeds of 20 miles per hour or more. LOS “D”, “E” and “F” corresponds to decreasing abilities to travel greater than 15 miles per hour and correspond to the overcapacity of the road system.

2. Describe the proposed pedestrian circulation pattern.
3. Discuss the location and number of parking spaces proposed.

#### G. Electric Power and Gas

1. Discuss the source of the electric power and the method of supplying the project.
2. Discuss the source of natural gas, if available, and the method of supplying the project.
3. Discuss plans to underground electric.

### IX. COMMUNITY SERVICES

#### A. Schools

1. Discuss the effect of the project on the school system, including number and ages of children generated by the project.
2. Describe the location of the schools to be affected and the capacity of those schools to accommodate the additional children generated by the project.
3. Discuss the effect that the additional children generated by the project will have on school bus routing or the need for additional bus routes.

#### B. Recreation

1. Describe existing recreational facilities in the area of the proposed project including active and passive types and identify the age groups participating; the general condition of the facilities; and the current level of use. Also state whether those recreational facilities, parks and open spaces are available to all residents.
2. Describe recreational facilities to be provided by the proposed development including active and passive types and identify the age groups that will likely use the new facilities. State any expected use limitations, e.g., hours of operation, and whether the facilities will be available to everyone or just residents of the project.
3. Indicate location and width of existing and proposed sidewalks, bike paths and other pedestrian ways on site and in adjacent areas.

#### C. Police

1. Describe the expected impact on police services, time and manpower needed to protect the proposed development and service improvements necessitated by the proposed development.

D. Fire

1. Describe the expected impact on fire services and service improvements necessitated by the proposed development.
2. Describe on-site fire fighting capabilities; on-site alarm or other warning devices; fire-flow water needs, and the source and delivery system proposed to meet those needs.

E. Public Works

1. Calculate the total linear feet of roadway to be publicly maintained and plowed.
2. Calculate the linear feet of street drains, culverts, sanitary sewers, and waterlines to be publicly maintained.
3. Analyze projected need, responsibility and costs to the Town of roadway and utility maintenance.

X. HUMAN CONSIDERATIONS

A. Aesthetics and Visual Impact

1. Discuss the likely change in the present character of the area due to the project, i.e., land use, density of development, etc.
2. Discuss the measures to be taken to minimize any adverse effects of the project, i.e., architecture, buffers, etc.
3. Describe the type, design, location, function and intensity of all exterior lighting facilities. Attention given to safety, privacy, security, and daytime and nighttime appearance shall be detailed.

B. Parks, Forests and Recreational Areas

1. Discuss how the location and construction of the project will affect existing and potential park and recreation areas, open spaces, natural areas, and scenic vistas.

C. Public Health

1. Discuss the project's effects on residents' public health due to changes in water quality, air quality, noise levels, etc.

APPENDIX C

**PLANNING BOARD FEE SCHEDULE**

| Type of Plan  | Necessary Forms & Fee | \$ Amount                                   | Description           |
|---|-----------------------|---|-----------------------|
| Approval Not Required Plan                                  | Form "A"              | \$35 (no new lot)<br>\$35 plus \$35 per lot | Non refundable        |
| Preliminary Plan  | Form "B" Checklist    | \$200 plus \$1.00/ft. of roadway            | Non refundable        |
|   | Review Fee            | \$2,000 plus \$1.00/ft. of roadway          | Partially Refundable* |
| Definitive Plan where Preliminary Plan <b>WAS</b> filed     | Form "C" Checklist    | \$500 plus \$4.00/ft. of roadway            | Non refundable        |
|   | Review Fee            | \$3,000 plus \$4.00/ft. of roadway          | Partially Refundable* |
|   | Inspection Fee        | \$6.00/ft. of roadway                       | Partially Refundable* |
| Definitive Plan where Preliminary Plan was <b>NOT</b> filed | Form "C" Checklist    | \$1000 plus \$6.00/ft. of roadway           | Non refundable        |
|   | Review Fee            | \$5,000 plus \$6.00/ft. of roadway          | Partially Refundable* |
|   | Inspection Fee        | \$6.00/ft. of roadway                       | Partially Refundable* |

\*Note: The balance of any and all review and inspection fees not expended to fund professional and technical assistance for a project will be refunded to the applicant.

## **APPENDIX D**

### **Development Guidelines by Landscape Type**

The following provides criteria for categorizing land into four (4) landscape types, based on landform, vegetation and existing development. For each landscape type, guidelines are provided for development consistent with town goals and character. The layout and construction of ways within subdivisions should be designed to comply with these guidelines and so as to facilitate vegetative cover and building development consistent with them. Included in these guidelines are considerations beyond subdivision control, such as suggested building materials. These are included here as a reference, for possible implementation at the developer's option.

Developers who believe that alternative guidelines would better meet the general goals being sought are encouraged to state those alternative guidelines as a part of their plan submittal.

#### **Open Plain**

**IDENTIFICATION** -- Flat land generally cleared of trees, now cropland or fields.

**OBJECTIVES** -- To maintain the open sweep of the land; avoid shapeless suburbia.

**BUILDING SITING** -- Cluster tightly, avoid scattered structures, repetitive yard dimensions.

**ROAD LOCATION** -- Lanes in clusters possibly rectilinear, others curving in response to minor land features.

**VEGETATIVE COVER** -- Protect any existing tree belts, plant street trees within clusters; mow, plow, graze.

**BUILDING DESIGN** -- Strong colors and textures, wood preferred; variation in basic building designs encouraged.

**OTHER CONSIDERATIONS** -- Agriculture encouraged.

#### **Wooded Plain**

**IDENTIFICATION** -- Flat land, generally wooded.

**OBJECTIVES** -- To avoid "suburban" development character, protect forest ecology.

**BUILDING SITING** -- Cluster preferred; scattered buildings away from or on edges of clearings, screened from roads.

**ROAD LOCATION** -- Frequent curves, staggered intersections.

**VEGETATIVE COVER** -- Clear underwood, only selectively clear trees.

**BUILDING DESIGN** -- Less critical than in other areas.

OTHER CONSIDERATIONS -- Better suited to development than most landscape types.

**Mountain**

IDENTIFICATION – Mountainous land and associated highlands, predominantly steep and wooded.

OBJECTIVES -- To protect the fragile mountain ecology, protect the visual quality of the town's backdrop.

BUILDING SITING -- Cluster on less steep portions and in land folds, away from crests.

ROAD LOCATION -- Follow contours, minimizing cuts and fills.

VEGETATIVE COVER -- Preserve existing cover to degree possible.

BUILDING DESIGN -- Low structures, slope-following; no large, light surfaces, bright paint or exposed metal; muted color, soft form; wood, earth, weathered silvers, grays, browns.

OTHER CONSIDERATIONS -- Extraordinary care necessary to avoid erosion; development generally undesirable.

**Village**

IDENTIFICATION -- Land in the vicinity of concentrated development, whose character is established by existing development.

OBJECTIVES -- To continue and provide consistency with the pattern and character of existing development.

BUILDING SITING -- Compact clustering; avoid scattered structures.

ROAD LOCATION -- Short rectilinear segments in clusters, others curving in response to land features.

VEGETATIVE COVER -- Retain or plant street trees, preserve other trees where feasible.

BUILDING DESIGN -- Anything consistent with scale, texture and colors of nearby structures; wood preferred; variety in basic building designs encouraged.

OTHER CONSIDERATIONS -- Better suited to development than most landscape types.

APPENDIX E

| LID SITE PLANNING AND DESIGN CHECKLIST   |                            |
|--|----------------------------|
| <p>The applicant must document specific LID site planning and design strategies applied for the project. If a particular strategy was not used, a justification and description of proposed alternatives must be provided. If a strategy is not applicable (N/A), applicants must describe why a certain method is not applicable at their site.</p> |                            |
| SITE PLANNING STRATEGIES   | Incorporated into Project? |
| a. Natural vegetation has been retained to the maximum extent possible.  | <input type="checkbox"/>   |
| b. Cut and fill have been minimized.   | <input type="checkbox"/>   |
| c. Impacts to sensitive resources such as floodplains, steep slopes, erodible soils, wetlands, surface waters, and their riparian buffers has been avoided or minimized.   | <input type="checkbox"/>   |
| d. Impervious lot coverage has been minimized to the extent possible (not applicable to the CARD Zoning District)  | <input type="checkbox"/>   |
| <p><i>Explanation of constraints and/or proposed alternatives:</i></p><br><br><br><br>   |                            |
| STREET LAYOUT STRATEGIES   | Incorporated into Project? |
| a. Street and driveway lengths are minimized, and avoid steep hillsides and important natural features.  | <input type="checkbox"/>   |
| b. Pavement width has been kept to the minimum requirements of the Subdivision Rules and Regulations, unless otherwise specified by the Planning Board.  | <input type="checkbox"/>   |
| c. Permeable pavement is used for sidewalks, overflow parking areas, or driveways, provided the appropriate soil and slope conditions exist.   | <input type="checkbox"/>   |
| <p><i>Explanation of constraints and/or proposed alternatives:</i></p><br><br><br><br>   |                            |

| STORMWATER MANAGEMENT STRATEGIES  | Incorporated into Project? |
|---|----------------------------|
| a. Vegetated roadside swales are used to collect, hold, and treat runoff from roadways and parking lots. Where curbs are deemed necessary to protect the roadside edge, perforated (that allow runoff to flow into swales) or “invisible curbs” (flush with the road surface) are used. | <input type="checkbox"/>   |
| b. Vegetated filter strips are used to filter and infiltrate runoff from roadways, parking lots, and driveways.   | <input type="checkbox"/>   |
| c. Constructed wetlands are used for stormwater retention and pollutant removal.  | <input type="checkbox"/>   |
| d. Rain gardens or bioretention cells (in commercial applications) are used to collect, treat, and infiltrate runoff.   | <input type="checkbox"/>   |
| e. Runoff from roofs is discharged to lawn areas, rain gardens, and/or rain barrels.  | <input type="checkbox"/>   |
| <i>Explanation of constraints and/or proposed alternatives:</i>   |                            |
| SITE WORK STRATEGIES  | Incorporated into Project? |
| f. Clearing of the right-of-way will be limited to what is necessary to construct the roadway, drainage, sidewalk, and utilities, and to maintain site lines.   | <input type="checkbox"/>   |
| g. Permeability of soils that have been compacted by construction vehicles will be reestablished (for example, by rototilling lawn areas prior to seeding, etc.)  | <input type="checkbox"/>   |
| <i>Explanation of constraints and/or proposed alternatives:</i>   |                            |