REGULATIONS GOVERNING THE SUBDIVISION OF LAND

PLANNING BOARD
SHUTESBURY, MASSACHUSETTS

October 1990 printing

Adopted February 27, 1987

Amended October 5, 1987
Amended December 7, 1987

Updated & reformatted December 22, 2004 by Lisa M. Divoll

this document is printed on 50% recycled paper

$25.00

REGULATIONS GOVERNING THE SUBDIVISION OF LAND

PLANNING BOARD
SHUTESBURY, MASSACHUSETTS

October 1990 printing

Adopted February 27, 1987

Amended October 5, 1987
Amended December 7, 1987
Amended January 8, 2001 (page II-3)
Fees increased December 1, 2003
Amended March 22, 2006 (page V-3)
Amended April 23, 2008(section VIII)

A true copy. Attest: _____
Shutesbury Town Clerk

Town Seal

This document is printed on % recycled paper

TABLE OF CONTENTS

Description		Page
SECTION I.	AUTHORITY AND PURPOSE	I-1
I.A.	Authority	I-1
I.B.	Purpose	I-1
SECTION II.	GENERAL	II-1
II.A.	Definitions	II-1
1.	Applicant, Developer, Subdivider	II-1
2.	Board or Planning Board	II-1
3.	Building	II-1
4.	Consultants or Consulting Services	II-1
5.	Definitive Plan	II-1
6.	Development Impact Statement (DIS)	II-2
7.	Metric Equivalent Measure	II-2
8.	Owner	II-2
9.	Streets	II-2
10.	State Construction Standards, Mass. DPW Construction Standards	II-2
II.B.	Plan Believed Not to Require Approval	II-3
II.C.	Basic Requirements	II-4
II.D.	Zoning	II-4
II.E.	One Dwelling Per Lot	II-4
II.F.	Engineering	II-5
SECTION III.	PRELIMINARY PLAN	III-1
III.A.	General	III-1
III.B.	Filing Procedure	III-1
III.C.	Contents	III-2
III.D.	Approval	III-3
SECTION IV.	DEFINITIVE PLAN	IV-1
IV.A.	General	IV-1
IV.B.	Filing Procedure	IV-1
IV.C.	Contents	IV-3
IV.D.	Performance Guarantee	IV-6
1.	Amount of Guarantee	IV-6
2.	Approval with Bond, Money or Negotiable Securities	IV-6
3.	Approval with a Covenant	IV-7
4.	Approval with a Mortgage Agreement	IV-8
5.	Final Release of Performance Guarantee	IV-9
IV.E.	Suitability of the Land	IV-9
1.	Board of Health Review	IV-9
	a. Report to Planning Board	IV-9
	b. Conditions to be Endorsed on Definitive Plan	IV-10
2.	Wetlands Protection Act	IV-10
3.	Review by Other Town Agencies	IV-11
IV.F.	Public Hearing	IV-11
IV.G.	Approval, Modification and Approval, or Disapproval	IV-11

IV.H. Approval is not Acceptance IV-13
IV.I. Endorsement of Plan IV-13
IV.J. Recording of Plan and Notification of the Board IV-13
IV.K. Modification, Amendment or Rescission of Plan Approval IV-14

SECTION V. DESIGN STANDARDS V-1
V.A. Basic Requirements V-1
V.B. Relationship to Town Plans V-1
V.C. Lot Size and Frontage V-1
V.D. Protection of Natural Features V-1
V.E. Access Through Another Municipality . . . V-1
V.F. Metric Equivalent Measure V-1
V.G. Streets V-2
1. Location and Alignment V-2
2. Right of Way and Street Design Standards V-3
3. Street Jogs V-3
4. Intersections V-4
V.H. Adequate Access from Public Way V-4
V.I. Easements and Restrictions V-5
1. Layout of Easements V-5
2. Conservation Restrictions V-5
3. Open Space V-5
V.J. Sewerage V-6
1. Septic Disposal Systems V-6
2. Storm Sewers V-6
V.K. Water Supply V-7
1. Water Wells V-7
2. Fire Hydrants V-7
V.L. Solar Energy V-8

SECTION VI. REQUIRED IMPROVEMENTS VI-1
VI.A. Basic Requirements VI-1
VI.B. Clearing and Grubbing Right-of-Way VI-1
VI.C. Responsibility VI-1
VI.D. Sewage Disposal Facilities VI-1
VI.E. Water for Other than Fire Fighting Purposes VI-2
VI.F. Utilities VI-2
VI.G. Road, Berm, and Curb Cuts VI-2
VI.H. Sidewalks and Bicycle Paths VI-2
VI.I. Groundwater Drainage VI-2
VI.J. Retaining Walls VI-3
VI.K. Fire Hydrants VI-3
VI.L. Trees and Plantings VI-3
1. Existing Trees VI-3
2. Street Trees VI-3
3. Bank Plantings VI-4
4. Corner Plantings VI-5
5. Cul-de-Sac Plantings VI-5
6. Grass Strips VI-6
VI.M. Street Signs VI-6
VI.N. Street Lights VI-6

VI.O. Guard Rails VI-6
VI.P. Bounds and Lot Corners VI-6
VI.Q. As-Built Plan VI-6
VI.R. Final Cleaning VI-7
VI.S. Inspections of Improvements VI-7

SECTION VII. ADMINISTRATION VII-1
VII.A. Authority VII-1
VII.B. Waiver of Compliance VII-1
VII.C. Inspection and Reimbursement for Consulting Services VII-1
VII.D. Severability VII-2
VII.E. Amendments VII-2
VII.F. Invalidation by State Law VII-2
VII.G. Forms and other information. VII-2
VII.H. Additional References VII-2

SECTION VIII. DEVELOPMENT IMPACT STATEMENT VIII-1

APPENDIX

END OF TABLE OF CONTENTS

(this page left blank intentionally)

SECTION I. AUTHORITY AND PURPOSE

I.A. Authority

These Regulations shall be effective on and after December 7, 1987, and so remain until modified or amended by the Planning Board. They are enacted by the Shutesbury Planning Board under authority granted by Section 81-Q of Chapter 41 of the General Laws. For matters not covered by these Regulations, reference is made to the Subdivision Control Law, Sections 81-K to 81-GG of Chapter 41 of the General Laws, as most recently amended. Subdivision control is an exercise of the police power under which the various levels of government are responsible for protection of the public health, safety, and welfare.

I.B. Purpose

These Regulations for subdivision control have been enacted for the purpose of protecting the safety, convenience, and welfare of the inhabitants of the Town by regulating the laying out and construction of ways in subdivisions providing access to the several lots therein, but which have not become public ways, and ensuring sanitary conditions in subdivisions and in proper cases parks and open areas. The powers of the Planning Board and the board of appeal under the Subdivision Control Law and under these Regulations shall be exercised with due regard for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel; for lessening congestion in such ways and in the adjacent public ways; for reducing danger to life and limb in the operation of motor vehicles; for securing safety in the case of fire, flood, panic, and other emergencies; for insuring compliance with the applicable zoning ordinances or by-laws; for securing adequate provision for water, sewerage, drainage, underground utility service, fire, police and other similar municipal equipment, and street lighting and other requirements where necessary in a subdivision; and for coordinating the ways in a subdivision with each other, with the public ways in the Town and with the ways in neighboring subdivisions.

END OF SECTION I

(this page left blank intentionally)

SECTION II. GENERAL

II.A. Definitions

In construing these Regulations, the definitions in Section 81-L of Chapter 41 of the General Laws shall apply (unless a contrary intention clearly appears). In addition, the following words shall have the following meanings:

1. Applicant, Developer, Subdivider

   The person who applies for the approval of a Plan of a proposed subdivision. The applicant or applicants must be the owner or owners of all the land included in the proposed subdivision. An agent, representative or his/her assigns may act for an owner, provided a properly executed power of attorney (or other written evidence acceptable to the Board) is submitted. In the case of a general or limited partnership, all general partners must join in the application and must submit documentation of the legal existence of the partnership and its authority to do business in Massachusetts. In the case of a trust, all trustees must join in the application and submit documentation of the legal existence of the trust and its authority to do business in Massachusetts. In the case of a corporation, the application shall be made by the President, shall have the corporate seal affixed, and shall be accompanied by a list of all officers and directors, plus documentation of the legal existence of the corporation and its authority to do business in Massachusetts. An attorney acting on behalf of any applicant shall be licensed to practice law in Massachusetts and shall submit a written statement of representation.

2. Board or Planning Board

   The Planning Board of the Town of Shutesbury, Massachusetts.

3. Building

   A dwelling, shed, garage or other structure, not to be interpreted as a sewer, water or other utility line.

4. Consultants or Consulting Services

   Includes, but is not limited to, architects, biologists and other environmental experts, chemists, engineers, geologists, landscape architects, planners, lawyers, sanitarians, and surveyors.

5. Definitive Plan

   A map of a proposed subdivision, three acetate overlays, a Development Impact Statement, together with all other forms, documents, drawings, information, filing fees, and reimbursement payments required by these Regulations, submitted to the Planning Board for its approval.

6. Development Impact Statement (DIS)

A documented, written analysis of a proposed subdivision which contains all information provided by Section VIII of these Regulations, and which provides the Planning Board and its agents or consultants with information necessary for plan review. The DIS is prepared by the applicant.

7. Metric Equivalent Measure

The equivalent distance in feet of even meter distances are used on permanent rights-of-way and easements in anticipation of national conversion to the metric system.

8. Owner

The owner of record as shown by the records in the Franklin County Registry of Deeds or Land Court.

9. Streets

a. Major Street - a street which, in the opinion of the Board, is likely to carry substantial volumes of through traffic.

b. Secondary Street - a street other than a major street which, in the opinion of the Board, is likely to carry traffic other than just to or from lots on that street.

c. Minor Street - a street which, in the opinion of the Board, is likely to be used only by vehicles traveling to or from lots on that street.

d. Dead End Street/Cul-de-Sac - a public or private vehicular right-of-way which affords the principal means of access to abutting property and which joins another thoroughfare at only one end. Any such thoroughfare, which joins or intersects a dead end street/cul-de-sac, shall have adequate access at both ends from a Town, County, or State public way adjacent to the subdivision. (See Section V.G.1.E. of these Regulations concerning dead end streets, and Section V.H. concerning adequate access from a public way.)

10. State Construction Standards, Mass. DPW Construction Standards

These specifications are published by the Massachusetts Department of Public Works. They are entitled Standard Specifications for Highways and Bridges, and include all supplements, updates, revisions or future editions covering substantially the same subject matter. All matters left open or undetermined by these specifications shall be specified by the Board on a case by case basis.

II.B. Plan Believed not to Require Approval

1. Any person who wishes to cause to be recorded in the Registry of Deeds or to be filed with the Land Court, a plan of land, and who believes that his/her plan does not require approval under the Subdivision Control Law, may submit to the Planning Board the following:

   a. a reproducible original and five (5) copies of his/her plan;

   b. [**bold type** indicates amendment made on October 5, 1987] filing fee in the amount of $70 per lot, e.g. seventy dollars times the number of lots shown on the plan; the filing fee shall be in the form of a certified check or money order, made payable to "Town of Shutesbury, Massachusetts"; or written evidence that said filing fee has been paid to an appropriate Town official. **Lots marked "This is not a building lot" will not be included in calculating the filing fee**;

   c. application Form A, appended hereto, signed by the applicant and providing all information requested;

   d. all supporting evidence necessary to show that the plan does not require approval.

   In addition, the applicant shall provide written notice to the Town Clerk by personal delivery in hand or by registered mail, with return receipt requested. Said notice shall state the date of submission to the Planning Board of the items specified in Sections II.B.1.a through II.B.1.d above, and shall be accompanied by one copy each of the plan and application Form A. If the notice is given by delivery, the Clerk shall, if requested, give a written receipt therefore to the person who delivered such notice.

[***italicized type*** indicates amendment made on January 8, 2001] **For the purposes of this section, the date of submission to the Planning Board shall mean the date of the first regular or special Planning Board meeting following delivery of all copies of the items specified in Sections II.B.1.a through II.B.1.d above to the Town Clerk. In order for a plan to be deemed so submitted, delivery to the Town Clerk must occur no later than seven (7) days prior to said Planning Board meeting. The date of said Planning Board meeting fixes the start of the period of time during which the Planning Board must act and report.**

2. [**bold type** indicates amendment made on October 5, 1987] [CAPITALIZED TYPE indicates amendment made on December 7, 1987] If the Board determines that the plan does not require approval, it shall within TWENTY-ONE (21) days and without a public hearing endorse on the plan the words "Planning Board Approval under the Subdivision Control Law Not Required." Said endorsement shall be signed by a majority of the Planning Board. If the Board determines that the plan does require approval under the Subdivision Control Law, it shall within TWENTY-ONE (21) days of submission of said plan so inform the applicant and return the reproducible original of the plan. The Board shall give written notice of its determination to the Town Clerk. Before the Board makes its determination, it shall review or have a consultant review the correctness of all street information and compliance with the Shutesbury Zoning By-Laws. If, in the judgment of the Board, consulting services are necessary or appropriate, the applicant shall reimburse the Town for the full cost of such services prior to the endorsement of the plan. Where the physical condition or width of a public way, from which the lots shown on the plan have their access, is considered by the Board to be inadequate either to provide for emergency services or to carry the traffic which is expected, in the opinion of the Board, to be generated by such lots, the Board shall determine that the plan does require approval under the Subdivision Control Law. **Where the Board determines that in its opinion adequate access (as contemplated by section 81M of the Subdivision Control Law and Section I.B. of these regulations) does not exist, then the Board shall determine that the plan does require approval under the Subdivision Control Law.**

3. [CAPITALIZED TYPE indicates amendment made on December 7, 1987] If the Board fails to act upon a plan submitted under this section or fails to notify the Town Clerk and the applicant of its action within TWENTY-ONE (21) days after its submission, it shall be deemed to have determined that approval under the subdivision control law is not required.

II.C. Basic Requirements

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 utilities and municipal services therein, unless and until a Definitive Plan of such subdivision has been submitted to and approved by the Board as hereinafter provided, and subsequently recorded at the Franklin County Registry of Deeds and, in the case of registered land, with the recorder of the Land Court.

II.D. Zoning

Subdivisions shall meet the requirements pertaining to lot size, frontage, and all other requirements under existing zoning laws. No subdivision rules can dictate the size, shape, width, frontage or use of lots except that they shall be in compliance with all applicable zoning requirements.

II.E. One Dwelling Per Lot

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

II.F. Engineering

The Definitive Plan shall be prepared by a Registered Land Surveyor. Construction details shall be designed by a Registered Professional Engineer.

(this space left blank intentionally)

END OF SECTION II

SECTION III. PRELIMINARY PLAN

III.A. General

[**bold type** indicates amendment made on October 5, 1987] Prior to the submission of a Preliminary Plan, a developer is encouraged to discuss his/her intentions with the Board. A Preliminary Plan of a subdivision may be submitted by the subdivider for discussion and approval by the Board. The submission of such a Preliminary Plan will enable the subdivider, the Board, other municipal agencies, and owners of property abutting the subdivision to discuss and clarify the problems of such a subdivision before a Definitive Plan is prepared. **Such plan must be filed to allow the Board forty-five (45) days in which to study and make recommendations toward the preparation of the Definitive Plan.** It is strongly recommended that a Preliminary Plan be filed in every case, especially where the developer intends to submit a series of Definitive Plans for approval over a period of time, or where the developer intends to develop only part of the total contiguous parcel. In this case, the Preliminary Plan shall show the future intended use or alternate uses for that part of the parcel not to be developed at the present time. In both cases, the Preliminary Plan will show proposed divisions, uses, and other improvements of the entire contiguous parcel. Prior to submission of the Preliminary Plan to the Planning Board and the Board of Health for approval, the subdivider should discuss the Plan with the Board of Selectmen, Conservation Commission, School Committee, Fire Department, Police Department, and Highway Department to obtain their recommendations. These recommendations may be incorporated in the Preliminary Plan with any changes and additions suggested by the Board.

III.B. Filing Procedure

Any person submitting a Preliminary Plan of a subdivision to the Planning Board for approval shall file with the Board the following:

1. a reproducible original and twelve (12) copies of his/her Preliminary Plan, which shall be on one or more sheets not larger than twenty-four inches by 36 inches (24" X 36") in size; at least three (3) of these copies shall have the significant features illustrated according to the following color scheme:

Roads - dark gray;
Streams and waterbodies - blue;
Wetlands - solid red;
Wetlands 100' buffer zone - dotted red;
One hundred year flood plains - orange;
Open space and recreation areas - green;
Pedestrian and bicycle paths - brown;
Subdivision boundaries - black;

2. [**bold type** indicates amendment made on October 5, 1987] **filing fee in the amount of either:**

   a. **$100 per lot (one hundred dollars times the number of lots shown on the Preliminary Plan; lots marked "This is not a building lot" will not be included in calculating the filing fee) or,**

b. **$ 1.50 per linear foot of the centerline of the subdivision road shown on the plan (one dollar and fifty cents times the number of linear feet of the centerline of the subdivision road shown on the Preliminary Plan),**

whichever is less; the filing fee shall be in the form of a certified check or money order made payable to "Town of Shutesbury, Massachusetts;" or written evidence that said filing fee has been paid to an appropriate Town official.

3. application Form B, appended hereto, signed by the applicant and providing all information requested;

4. twelve (12) copies of a draft Development Impact Statement.

The applicant shall also file one copy each of the plan, application Form B, and the draft Development Impact Statement with the Board of Health and obtain a receipt therefor, using Form K appended hereto.

In addition, the applicant shall provide written notice to the Town Clerk by personal delivery in hand or by registered mail, with return receipt requested. Said notice shall state the date of submission to the Planning Board of items III.B.1 through III.B.4 above, and shall be accompanied by one copy each of the Preliminary Plan, application Form B, and the draft development Impact Statement. If notice is given by delivery the Clerk shall, if requested, give a written receipt therefor to the person who delivered such notice.

If, in the judgment of the board, consulting services are necessary or appropriate, the applicant shall, prior to a determination on the Preliminary Plan by the Board, reimburse the Town for the full cost of such services. All such consultants shall be selected by the Board. Reimbursement shall be by certified check or money order made payable to "Town of Shutesbury, Massachusetts."

III.C. Contents

The Preliminary Plan may be drawn on tracing paper with pencil, at a scale of one inch equals forty feet (1" = 40') for subdivisions of less than fifty (50) lots, and one inch equals eighty feet (1" = 80') for subdivisions of more than fifty lots. The Preliminary Plan shall show the following:

1. the subdivision name, boundaries, north point, date, scale, legend, and title "Preliminary Plan;"

2. the names, addresses, and telephone numbers of the record owner, applicant, engineer, and surveyor;

3. the full names and mailing addresses of all abutters, as determined from the most recent local tax list;

4. the existing and proposed lines of streets, ways, easements, and any public areas within the subdivision in a general manner;

5. the proposed system of drainage, including adjacent existing natural waterways, in a general manner;

6. the approximate boundary lines of proposed lots, with approximate areas and dimensions;

7. the names, approximate location, and widths of adjacent streets;

8. the topography of the land in a general manner, with contour intervals of five (5) feet or less.

9. other major site features, such as swamps, bodies of water, wetlands, flood plains, stone walls, fences, buildings, trees of over sixteen (16) inch diameter, and rock outcroppings;

10. an index plan at a scale of one inch equals two hundred feet (1" = 200') whenever multiple sheets are used;

11. a key plan at a scale of one inch equals one thousand feet (1" = 1000') on all preliminary plans.

12. the applicant is urged to prepare acetate overlays in order to expedite Planning Board review.

III.D. Approval

[**bold type** indicates amendment made on October 5, 1987] The Preliminary Plan, when submitted, will be studied to determine if it is in compliance with these Regulations. **Within forty-five (45) days after submission, the Board shall approve, disapprove, or approve with modification the Preliminary Plan, noting thereon any changes that should be made.** In the case of disapproval, the Board shall state in detail its reasons therefore. The Board shall notify the applicant of its action by registered mail, with return receipt requested, and shall also notify the Town Clerk in writing. One copy of the Plan shall be returned to the subdivider and the others retained by the Board. Approval of the Preliminary Plan does not constitute approval of the subdivision but does facilitate the procedure in securing approval of the Definitive Plan.

(this space left blank intentionally)

END OF SECTION III

SECTION IV. DEFINITIVE PLAN

IV.A. General

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 the 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.

A Definitive Plan shall be governed by the zoning in effect at the time of submission of such plan or a Preliminary Plan from which a Definitive Plan has evolved in accordance with the provisions of Section 7A of Chapter 40A of the General Laws of the Commonwealth.

IV.B. Filing Procedure

Any person who submits a Definitive Plan of a subdivision to the Planning Board for approval shall file with the Board the following:

1. one original drawing of the Definitive Plan Map; the original drawing and the original of the Development Impact Statement shall be reserved for signatures to be returned to the applicant after approval or disapproval by the Planning Board;

2. twelve (12) contact prints (dark line on white background) made from the original drawing; at least three (3) of these prints shall have the significant features illustrated according to the following color scheme:

Roads - dark gray;
Streams and waterbodies - blue;
Wetlands - solid red;
Wetlands 100' buffer zone - dotted red;
One hundred year flood plains - orange;
Open space and recreation areas - green;
Pedestrian and bicycle paths - brown;
Subdivision boundaries - black;

3. [**bold type** indicates amendment made on October 5, 1987] **filing fee in the amount of either**:

   a. **$400 per lot if a Preliminary Plan was filed or $1,000 per lot if no Preliminary Plan was filed (e.g. four hundred dollars (or one thousand dollars) times the number of lots shown on the Definitive Plan; lots marked "This is not a building lot" will not be included in calculating the filing fee), or**

   b. **$6.00 per linear foot of the centerline of the subdivision road if a Preliminary Plan was filed or $15.00 per linear foot of the centerline of the subdivision road if no Preliminary Plan was filed (e.g. six dollars (or fifteen dollars) times the number of linear feet of the centerline of the subdivision road shown on the Definitive Plan),**

whichever is less; the filing fee shall be in the form of a certified check or money order made payable to "Town of Shutesbury, Massachusetts;" or written evidence that said filing fee has been paid to an appropriate Town official;

4. application Form C, appended hereto, signed by the applicant and providing all information requested;

5. an original and twelve (12) copies of a Development Impact Statement, prepared by the developer in accordance with the requirements of Section VIII.

6. Designer's Certificate Form D, appended hereto, signed by a registered engineer and registered land surveyor and providing all information requested.

7. Certified List of Abutters Form F, appended hereto, signed by the applicant and providing all information requested.

8. one set of three overlays shall be prepared on acetate at the same scale as the Definitive Plan Map; these overlays shall illustrate the following features:

   Overlay #1 -One hundred year flood plains, wetlands, aquifer recharge areas;
   Overlay #2 -Soils (including soil types), slopes greater than 25%;
   Overlay #3 -Vegetation types;

The applicant shall also file one copy each of the Definitive Plan Map, application Form C, and the Development Impact Statement with the Board of Health and obtain a receipt therefore, using Form K appended hereto.

In addition, the applicant shall provide written notice to the Town Clerk by personal delivery in hand or by registered mail, with return receipt requested. Said notice shall state the date of submission to the Planning Board of items IV.B.1 through IV.B.8 above, and shall be accompanied by one copy each of the Definitive Plan Map, application Form C, and the Development Impact Statement. If the notice is given by delivery the Clerk shall, if requested, give a written receipt therefore to the person who delivered such notice.

If, in the judgment of the Board, consulting services are necessary or appropriate, the applicant shall, prior to a determination on the Definitive Plan by the Board, reimburse the Town for the full cost of such services. All such consultants shall be selected by the Board. Reimbursement shall be by certified check or money order, made payable to "Town of Shutesbury, Massachusetts."

IV.C. Contents

The Definitive Plan Map shall be clearly and legibly drawn in black India ink upon tracing cloth or similar material. The plan shall be at a scale of one inch equals forty feet (1" = 40') or such other scale as the Board may accept

to show details clearly and adequately. Sheet sizes may not exceed thirty-six by forty-two inches (36" x 42") for construction plans and shall be no larger than twenty-four by thirty-six inches (24" x 36") for those sheets of the Definitive Plan that are to be recorded in the Franklin County Registry of Deeds. If multiple sheets are used, they shall be accompanied by an index sheet showing the entire subdivision. Suitable space shall be provided on the plan to record the action of the Board and the signatures of the members of the Board. The data required below may be on separate sheets as clarity and sound practice dictate. The Definitive Plan shall contain the following information:

1. Subdivision name including the way or ways on which it is situated, boundaries, north point, date scale, bench mark, and datum. All elevations shall refer to U.S. Coast and Geodetic Survey benchmarks if within five hundred (500) feet of the subdivision, or, in their absence, to other appropriate datum acceptable to the Board.

2. Legend denoting any signs and symbols used on the plan and not otherwise explained.

3. Name, address, and telephone number of record owner, subdivider, and surveyor. The seal and certificate number of the surveyor shall appear on the Definitive Plan.

4. Names and mailing addresses of all abutters as they appear in the most recent tax list or a subsequent deed.

5. Key plan, showing location of the subdivision at a scale of one inch equals one thousand feet (1" = 1000') and an accurate index plan at a scale of one inch equals one hundred feet (1" = 100').

6. All information required on the Preliminary Plan.

7. Existing and proposed topography at a two foot contour interval for gentle slopes (less than 25%) and at a five foot contour interval for steep slopes (25% or greater); elevations, expressed in feet above MSL (or current equivalent) shall be provided at a ten foot interval;

8. Street frontage, land area, and identification number for each proposed lot.

9. Water courses, one hundred year flood plains, wetlands, ponds, marshes, rock outcrop, stone walls, trees of over eight (8) inches diameter (unless otherwise specified by the Board) and other significant natural features.

10. Subsurface conditions on the tract, location and results of tests made to ascertain subsurface soil, rock and ground water conditions, depth to ground water, and on a separate sheet, location and results of soil percolation tests if individual sewage disposal systems are proposed. These percolation tests shall be: (a) made on each lot within the subdivision; (b) made by and at the expense of the applicant; and (c) shall be in accordance with the Board of Health regulations and the State Sanitary Code as applicable.

11. Size and location of existing and proposed water supply facilities.

12. Size and location of all fire hydrants, pump, water lines between hydrants and pump, and source(s) of water for fire fighting.

13. Location of all the following improvements unless specifically waived in writing by the Board: street paving, sidewalks, street lighting standards, all utilities above and below ground (i.e., electricity, phone, cable TV, gas), curbs, gutters, storm drainage, and all easements (with statement of the purpose of each such easement).

14. A storm drainage system shown including invert and rim elevations of all catch basins and manholes together with surface elevations of all waterways within the subdivision at one hundred (100) foot intervals and approximate depth of water at these points. Surface elevation and approximate depth of water at the annual high water line shown at each point where the drainage pipe ends at a waterway. Drainage calculations prepared by the applicant's engineer, including design criteria used, drainage area and other information sufficient for the Board to check the size of any proposed drain, culvert or bridge. Existing storm sewerage should be shown.

15. Existing and proposed lines of streets ways, easements, and public or common areas within the subdivision. (The proposed names of the proposed streets shall be shown in pencil until they have been approved by the Board.)

16. Data concerning the length, radii, and central angles of all horizontal curves; the location, bearing, and length of every street and way line, all lot and boundary lines, sufficient to permit reproduction of the same on the ground. The total length of each street shall be stated. All bearings are to be referred to a magnetic meridian, an established deed, or some appropriate meridian. Wherever a boundary line of the subdivision is within five hundred feet (500') of a Massachusetts Coordinate Survey Monument, the survey of the subdivision shall be tied to said monument or monuments.

17. Location of all permanent monuments properly identified as to whether existing or proposed. The distance and bearing to the nearest town, county or state monument on an accepted way, and monuments at all points of curvature and changes in direction of street side lines, or where designated by the Board.

18. Location, names, and present widths of streets bounding, approaching or within reasonable proximity of the subdivision and street lines to the access road leading from the subdivision to the nearest public road.

19. A sketch plan, acceptable to the Board, showing a possible or prospective street layout for any adjacent land owned or controlled by the owner or the applicant of the subdivision.

20. Profiles of proposed streets shall be drawn with:

a. A horizontal scale of one inch to forty feet (1" = 40') and a vertical scale of one inch to four feet (1" = 4').

b. Existing grade of road center line in fine black solid line.

c. All elevations based on the U.S. Coast and Geodetic Survey bench marks, or, in their absence, an appropriate datum.

d. Proposed center line grades with precise elevations at PVC, PVT, high point, and low point with precise stationing.

e. Rates of gradient shown in percentages.

f. All existing intersection walks, driveways, and basements shown on both sides.

g. All center lines, street lines, and curb lines of streets for 60 meters (196.85 feet) either side of each intersection on a connecting street.

h. Profiles showing vertical location of existing and proposed drainage lines and other utility crossings as well as required new waterways. Sizes of all pipes, slopes of all storm and sanitary lines, invert and rim elevation of each manhole or catch basin shall be shown. Profiles shall include proposed lines even if the new work is outside the subdivision. Water mains (for fire protection) will be shown in profile to demonstrate sufficient cover and clearance of their structures.

21. Cross sections and construction details shall include:

a. Roadway section showing paving, crown, berm, shoulder, tie to R/W line, width, walk and all other components or features.

b. Details for catch basins, manholes, endwalls and all other components or features, with specific references to the appropriate sections of the State Construction Standards.

c. Drainage trench or waterway relocation section.

IV.D. Performance Guarantee

1. Amount of Guarantee

Before endorsement of approval of a Definitive Plan for a subdivision, the subdivider shall provide a performance guarantee in accordance with this Section IV.D. in an amount which, in the judgment of the Board, is sufficient to cover all of the following:

a. the cost of improvements;

b. reimbursement to the Town for the full cost of all supervision, inspection, and consulting services provided by the Town or the Board;

c. a fifteen (15) percent contingency fund. The contingency fund shall be calculated by first totaling the amounts estimated by the Board to cover the costs in Sections IV.D.1.a and IV.D.1.b above and multiplying that total times 1.15. The formula shall be as follows: (cost of improvements + reimbursement to the Town) x 1.15 = amount of performance guarantee.

2. Approval with Bond, Money, or Negotiable Securities (Use Forms G or H appended hereto).

The subdivider may file a performance bond secured by surety, or deposit money or negotiable securities. Such bond or money or negotiable securities must be approved as to form and manner of execution by the Town counsel or counsel to the Board, and as to sureties by the Board of Selectmen, and shall be contingent on the completion of such improvements within two (2) years of the date of the bond or the date of deposit of money or negotiable securities.

If the Board shall decide at any time during said two-year term that:

a. improvements have been installed in a manner satisfactory to the Board in sufficient amount to warrant reductions in the face amount of such bond or the amount of money or negotiable securities; or,

b. the character and extent of the subdivision requires additional improvements, including but not limited to any improvements previously waived; or

c. the Board revises its estimates of the costs for Sections IV.D.1. or IV.D.2 above;

then the Board may modify its requirements for any or all such improvements and the face value of such performance bond or amount of money or negotiable securities shall thereupon be reduced or increased respectively by an amount determined by the Board.

3. Approval with a Covenant (Use Forms I and J appended hereto.)

Instead of filing a bond or depositing money or negotiable securities, subdivider may request approval of his/her Definitive Plan on condition that a covenant running with the land will be duly executed and recorded and inscribed on the Plan, or on a separate document referred to on the Plan. Such covenant shall provide in part that no lot may be built upon or sold until all of the improvements required by the Board have been completed and approved as provided hereafter.

In this case, before endorsement of approval of a Definitive Plan, there shall be filed by the subdivider a properly executed Approval with Covenant Contract (use Form I appended hereto) in accordance with Section IV.B.

Prior to delivering to the subdivider a Certificate of Performance (use Form J) whereby the restrictions relating to the lot or lots listed therein shall be terminated, the Board shall determine to its satisfaction that such improvements have been completed so as to adequately serve such lot or lots, in part by requiring that the subdivider submit to the Board the following:

a. Written evidence from a registered engineer appointed by the Board that the streets conform to the Planning Board requirements in accordance with the approved Definitive Plan.

b. Written evidence from the Chief of the Fire Department and from a registered engineer appointed by the Board that the fire hydrants, well or other water source, pipes, pump, and pump house conform to the Planning Board requirements in accordance with the approved Definitive Plan.

c. A certificate from a registered surveyor, appointed by the Board, that all permanent bounds and monuments as specified in Section IV.C.18. on all street lines and on the lot or lots to be released are in place and are accurately located in accordance with the approved Definitive Plan. As provided in these regulations, the developer shall reimburse the Town for the cost of the registered surveyor's services.

d. Written evidence from one or more consultants appointed by the Board that all other improvements serving the lot or lots to be released conform to Planning Board requirements in accordance with the approved Definitive Plan.

e. A performance bond secured by surety or by money or negotiable securities in an amount determined by the Board to be sufficient to cover the cost of surfacing and any remaining or uncompleted work (if not already completed as allowed in Sections IV.D.3.a through IV.D.3.d) and approved as to form and securities by the Town Manager, conditioned on the completion of the remaining improvements within one year of the date of the bond or the date of deposit of money or negotiable securities. Release of the bond, money or negotiable securities shall be subject to the written approval of a registered engineer that the work has been completed in accordance with requirements.

f. A completed Certificate of Performance (use Form J) for signature by a majority of the Board, if approved.

g. Upon completion of such required improvements the subdivider shall so notify the Board and the Town Clerk, by personal delivery in hand or by registered mail, with return receipt requested, requesting release from such covenant. The Board shall act on such request within forty-five days.

4. Approval with a Mortgage Agreement

Following the recording of a first mortgage covering the premises shown on the Definitive Plan or a portion thereof given as security for advances to be made to the applicant by the lender, the Board may, at its option, release lots from the operation of the covenant given pursuant to Section IV.D.3. without receipt of a bond or deposit of money or negotiable securities, upon delivery to the Board of an agreement with said Board, which shall be executed by the subdivider and the lender and shall provide for retention by the lender of sufficient funds otherwise due the subdivider to secure the construction of all improvements required by the Board in accordance with the approved Definitive Plan. Said agreement shall also provide for a schedule of disbursement which may be made to the applicant upon completion of various steps of the work (based upon written evidence in accordance with Sections IV.D.3.a. through IV.D.3.d. above), and work is not completed within the time set forth by the subdivider, any

funds remaining undisbursed shall be available to the Town of Shutesbury for completion of the unfinished work and correction of deficiencies.

5. Final Release of Performance Guarantee

Full security, in whatever form provided, shall not be released by the Selectmen until they receive written certification from the Planning Board of the following: the integrity of road pavement, drainage and other improvements have been verified by one full calendar year of use or existence; provisions for the continued maintenance of improvements have been accepted by the Board; the recorded plans have been received; and the Town has been reimbursed for the full cost of consulting services.

IV.E. Suitability of the Land

1. Board of Health Review

a. Report to Planning Board

When a Definitive Plan of a subdivision is submitted to the Board, a copy thereof shall also be filed with the Board of Health as provided in Section IV.B. The Board of Health shall, within forty-five (45) days after the plan is so filed, report in writing to the Planning Board its approval or disapproval of said plan. If the Board of Health disapproves said plan, it shall make specific findings as to which, if any, of the lots shown in such plan cannot be used for building sites without injury to the public health, and include such specific findings and the reasons therefore in its report to the Planning Board, and where possible, shall make recommendations for the adjustment thereof. The Board of Health shall send to the applicant by registered mail, with return receipt requested, a copy of its report to the Planning Board. Failure to so report shall be deemed approval by the Board of Health. In the event approval by the Board of Health is by failure to make a report, the Planning Board shall note on the plan that health approval is by failure to report.

b. Conditions to be Endorsed on Definitive Plan

Any approval of the Definitive Plan by the Planning Board shall only be given on condition that the lots or land as to which such findings were made shall not be built upon without prior written consent of the Board of Health to the Planning Board. The Planning Board shall endorse on the plan such conditions, specifying the lots or land to which said conditions apply.

A Definitive Plan shall be approved by the Planning Board only upon condition that each lot shall be provided with a well, septic tank, and leaching system satisfactory to the Board of Health, and that no dwelling shall be built on any lot without first securing both a well permit and a disposal works construction permit from the Board of Health. Approval of a Definitive Plan for a subdivision 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 a well or an individual sewage

system; and, such approval of a Definitive Plan shall not be treated as, nor deemed to be, an application for a permit to construct or use a well or an individual sewage system on any lot contained therein.

2. Wetlands Protection Act

No activity of any kind subject to regulation under the Massachusetts Wetlands Protection Act or any local wetlands by-law may be carried out unless approved in accordance with that Act and by-law.

In order to determine if the proposed subdivisions, or parts thereof, are subject to the provisions of the Wetlands Protection Act or a local wetlands by-law, the Planning Board shall submit a copy of the Definitive Plan to the Conservation Commission, together with a request that the Conservation Commission file a report with the Planning Board within forty-five (45) days following submission of the plan. Said report should state that the area within the proposed subdivision is (a) not subject to the provisions of the Wetlands Protection Act or a local wetlands by-law, or (b) the Wetlands Protection or a local wetlands by-law applies to certain indicated areas. In the event that in the opinion of the Conservation Commission the Act or by-law does apply, the Planning Board shall include in its decision for approval a condition that the applicant shall obtain approval from the Conservation Commission prior to any activity within the affected areas. If the Conservation Commission does not make a report to the Board, said condition shall provide that no activity of any kind subject to regulation under the Massachusetts Wetlands Protection Act or a local wetlands by-law may be carried out unless approved in accordance with that act and by-law.

The making of a report by the Conservation Commission to the Planning Board concerning a proposed Definitive Plan shall not be treated as, nor deemed to be approval of, an Order of Conditions or any other approval provided by the Wetlands Protection Act or regulations issued there-under, or by any local wetlands by-law; and, a request by the Planning Board for such a report shall not be treated as, nor deemed to be, a Notice of Intent or any other application provided by the Wetlands Protection Act or regulations issued there-under, or by any local wetlands by-law.

3. Review by Other Town Agencies

The Planning Board shall, upon submission of a Definitive Plan, transmit one copy each to the Board of Selectmen, Fire Department, Highway Department, Police Department, and consultants selected by the Board for their review. Comments and recommendations shall be made to the Planning Board within forty-five days following receipt of a copy of the plan.

IV.F. Public Hearing

Before approval, modification and approval, or disapproval of the Definitive Plan is given, a public hearing shall be held by the Board. Notice (Form E appended hereto) of the time and place, and of the subject matter sufficient for identification, shall be given by the Board at the expense of the applicant by advertisement in a newspaper of general circulation in the Town

of Shutesbury once in each of two successive weeks, the first publication being not less than fourteen (14) days before the day of such hearing. A copy of said notice shall be mailed to the applicant and to all owners of land abutting upon the subdivision as appearing in the most recent tax list (use Form E appended hereto).

IV.G. Approval, Modification and Approval, or Disapproval

1. After the hearing provided in Section IV.F. above, and after the report of the Board of Health (or lapse of forty-five days without such report) the Planning Board shall approve, modify and approve, or disapprove such plan. A Definitive Plan disapproved by the Board of Health shall not be approved by the Planning Board until the deficiencies noted by the Board of Health have been corrected. In the event of disapproval, the Board shall state in detail wherein the plan does not conform to these Regulations or the recommendations of the Board of Health. In determining whether or not the plan conforms to these regulations, the following criteria shall be considered:

   a. Completeness and technical adequacy of all submissions;

   b. Determination that development at this location, as proposed in the Definitive Plan, does not entail unwarranted hazard to the health, safety or welfare of future residents of the subdivision or to others because of possible natural disasters, traffic hazard, or environmental degradation;

   c. Conformity with the Design Standards included in or cited by these Regulations;

2. The Planning Board shall file a certificate of its action with the Town Clerk, and shall send notice of such action to the applicant by registered mail, with return receipt requested.

3. [**bold type** indicates amendment made on October 5, 1987] **Time limits for action by Planning Board**

   a. **Where a preliminary plan has been submitted and acted upon or where at least forty-five (45) days have elapsed since submission of the preliminary plan, an applicant may file a definitive plan. The failure of the Planning Board either to take final action or to file with the Town Clerk a certificate of such action regarding a definitive plan submitted by an applicant within ninety (90) days after such submission, or ninety (90) days after the postmarked date if the Plan is submitted by mail, or such further time as may be agreed upon at the written request of the applicant shall be deemed to be an approval thereof. Notice of such extension of time shall be filed immediately by the Planning Board with the Town Clerk.**

   b. **Where no preliminary plan has been submitted and acted upon or where forty-five (45) days have not elapsed since submission of such preliminary plan, and a definitive plan is submitted, the failure of the Planning Board either to take final action or to file with the Town Clerk a certificate of such action regarding a plan submitted by an applicant within one hundred thirty-five (135) days after such submission, or one hundred thirty-five**

(135) days after the postmarked date if the Plan is submitted by mail, or such further time as may be agreed upon at the written request of the applicant, shall be deemed to be an approval thereof. Notice of such extension of time shall be filed immediately by the Planning Board with the Town Clerk.

IV.H. Approval is Not Acceptance

Approval of the Definitive Plan, or subsequent release of security upon completion of construction, does not constitute the laying out or acceptance by the Town of streets and easements within a subdivision. Compliance with the existing Laws of the Commonwealth and by-laws and procedures of the Town of Shutesbury are all required before acceptance of any street or easement. Such acceptance is at the discretion of the Town.

IV.I. Endorsement of Plan

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 all of the following events have occurred:

1. the expiration of twenty days without notice of appeal to the superior court, or, if appeal has been taken, the expiration of twenty days after the entry of a final decree of the court sustaining the approval of such plan.

2. the Town shall be reimbursed the full cost of all consulting services rendered up to the time of approval of the plan;

3. a performance guarantee shall be submitted and approved as provided in Section IV.E. of these Regulations; the developer is to provide the Town with a satisfactory performance guarantee within thirty (30) days after the twenty (20) day appeal period has expired, and upon acceptance of the guarantee, the plan will be endorsed within thirty (30) days by the Planning Board.

The plan bearing such endorsement shall be delivered by the Planning Board to the person who submitted such plan. After the Definitive Plan has been approved and endorsed, the applicant shall furnish the Board with twelve (12) prints thereof, and with a reproducible permanent original.

IV.J. Recording of Plan and Notification of the Board

1. Within ten (10) days after the Definitive Plan, as approved and endorsed, has been recorded at the Franklin County Registry of Deeds and in the case of registered land, with the recorder of the Land Court, the applicant shall notify the Board in writing of the date of such recording and provide written evidence of such recording.

2. Upon receipt of notification of recording, the Board shall file one print of the Definitive Plan with the Building Inspector. In accordance with the statute, where approval with covenant is noted thereon, the Building Inspector shall not issue any permit for the construction of a building on any lot within the subdivision without receipt from the Board of a copy of the Certificate of Performance (use Form J appended hereto).

IV.K. Modification, Amendment or Rescission of Plan Approval

The Planning Board, on its own motion or on the petition of any person interested, shall have power to modify, amend or rescind its approval of a plan of a subdivision, or to require a change in a plan as a condition of its retaining the status of an approved plan. All of the provisions of these regulations relating to the submission and approval of a Definitive Plan shall, so far as apt, be applicable to the approval of the modification, amendment or rescission of such approval. Any such action shall be in accordance with the provisions of section 81-W (and the recording requirements of section 81-X) of Chapter 41 of the General Laws.

END OF SECTION IV

SECTION V. DESIGN STANDARDS

V.A. Basic Requirements

The subdivider shall observe all design standards for land division as hereinafter provided. These standards shall be considered minimum standards and shall be varied from or waived only as provided in Section VII. State Construction Standards shall be followed, and all matters left open or undefined in those Standards shall be specified by the Board on a case by case basis. Specification of matters not covered by the State Construction Standards shall be made by the Board or its engineering consultant on a case by case basis, based wherever possible on the publications of the American Association of State Highway and Transportation Officials (AASHTO) or other publications cited in section VII.H. of these regulations.

V.B. Relationship to Town Plans

The design and layout of a proposed subdivision should be guided by the goals and objectives of any existing master plans, village plans, or statements of goals and objectives for the Town of Shutesbury.

V.C. Lot Size and Frontage

All lots shall be of such size and dimensions as to meet at least the minimum requirements of the Zoning by-law.

V.D. Protection of Natural Features

All natural features such as trees of over sixteen (16) inch diameter, water courses, one hundred year flood plains, wetlands, ponds and other waterbodies, marshes, stone walls, scenic points, and historic sites shall be preserved.

V.E. Access Through Another Municipality

In case access to a subdivision crosses land in another municipality, the board may require certification, from appropriate authorities, that such access is in accordance with the Master Plan and subdivision requirements of such municipality and that a legally adequate performance bond has been duly posted or that such access is adequately improved to handle prospective traffic.

V.F. Metric Equivalent Measure

In light of possible future conversion to metric land measurement, widths of rights-of-way and easements, as well as radii of the same, shall be in feet that equate to even metric units. For instance, a right-of-way will be 59.054 feet wide, or 18 meters; a corner radius will be 29.527 feet, or 9 meters. These and all other measurements shall be expressed in both metric and English (Imperial) terms.

V.G. Streets

1. Location and Alignment

a. [**bold type** indicates amendment made on October 5, 1987] **All streets in the proposed areas to be developed shall be designed so that, in the opinion of the Board, they will provide safe vehicular travel at a design speed of thirty (30) miles per hour. Where minimum standards are not herein specified, AASHTO (American Association of State Highway and Transportation Officials) shall apply.**

b. Streets shall be continuous and in alignment with existing streets so far as practicable and shall comprise a convenient system with connections to insure free circulation of vehicular traffic. This section is intended to enable the Board to ensure both adequate access to the subdivision from adjacent streets and continuity of travel within the subdivision itself. (See Section V.H. of these Regulations concerning adequate access from a public way.)

c. Provision satisfactory to the Board shall be made for the proper projection of streets, or for access to adjoining property which is not yet subdivided.

d. Reserve strips prohibiting access to streets or adjoining property shall not be permitted.

e. Dead-end streets/cul-de-sacs are prohibited. At the discretion of the Board, this prohibition may be waived and not more than one (1) dead-end street per subdivision may be allowed, but only if said street meets the following requirements:

(1) Any dead-end street shall be provided with a circular turn-around at the end having an outside radius not less than eighteen (18) meters (50.054 feet). (See Section V.G.1.g.);

(2) A dead-end street shall be no longer than one hundred twenty-five meters (410.104 feet), including the turnaround;

(3) A dead-end/cul-de-sac street shall not provide access to more than six (6) lots;

(4) Any thoroughfare which joins or intersects a dead-end street shall have adequate access at both ends from a Town, County, or State public way adjacent to the subdivision. (See Section V.H. concerning adequate access from public way); and

(5) The Board must be satisfied that there is adequate access to all lots on the dead-end street for fire engines, ambulances and other emergency equipment, even if the street is blocked (such as by events including but not limited to a fallen tree or automobile accident).

(6) A dead-end street shall not have a grade of greater than two (2) percent for the last thirty-five (35) meters (114.83 feet) at the closed end.

a. Property lines at intersections of Major and Secondary Streets shall be cut back to provide for curb radii of not less than nine (9) meters (29.527 feet). For Minor Streets a radius of not less than six (6) meters (19.685 feet) is required.

g. This section consists of a chart, entitled "Typical Acceptable Turn-Arounds," which is included in these Regulations, and incorporated herein by reference.

h. No street shall be constructed within one hundred (100) feet from any wetland, on any one hundred year flood plain, or on any other land subject to the jurisdiction of the Shutesbury Conservation Commission and the Massachusetts Department of Environmental Quality Engineering, pursuant to the Massachusetts Wetlands Protection Act or regulations issued thereunder, or a local wetlands by-law.

i. The road rights-of-way shown on a subdivision plan shall be located on land which slopes at a grade of less than 15 percent as of the date of adoption of this paragraph [March 22, 2006].

j. In addition to the applicable provisions of the Town of Shutesbury's earth removal bylaw, all construction within a road right-of-way shall be located so as to limit the cutting or filling of soil or subsoil to depths of less than 8 feet. The cut or fill depths shall be measured from the pre-construction natural grade to the proposed grades within the right-of-way.

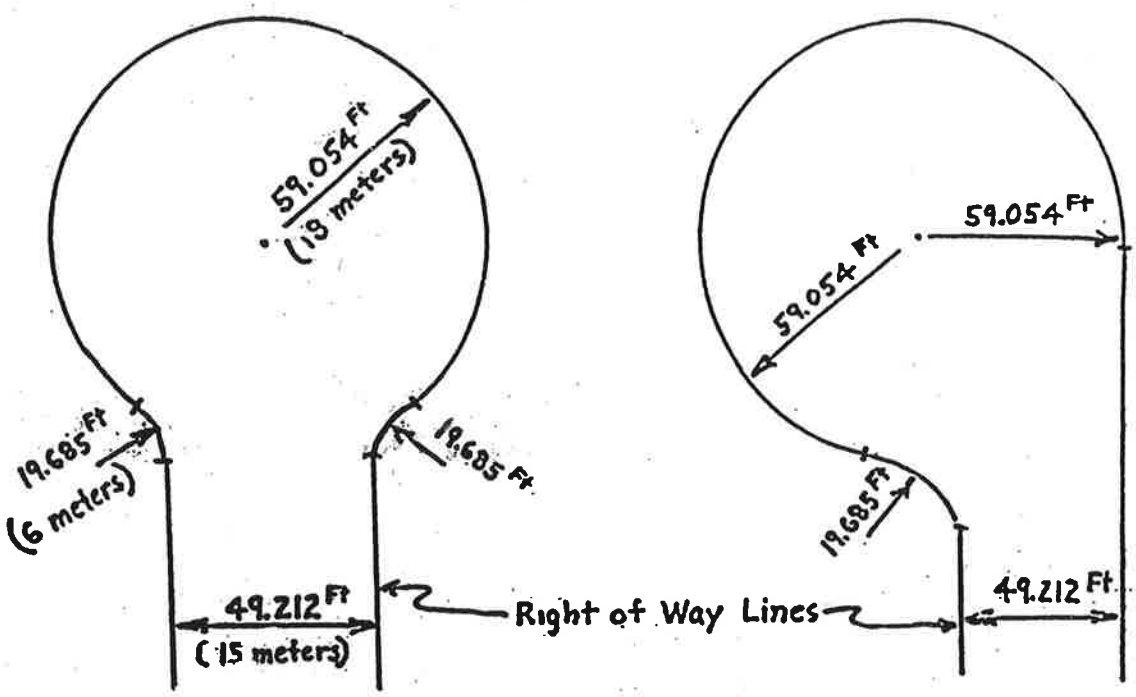
2. This section consists of a chart entitled "Right-of-Way and Street Design Standards," which is included in these Regulations and incorporated herein by reference. The Board may, in its discretion, minimum design speeds and maximum grades on a case by case basis. For other design aspects the Board may, in its discretion, require compliance with publications of the American Association of State Highway and Transportation Officials (AASHTO), including but not limited to A Policy on Geometric Design of Highways and Streets

3. Street Jogs

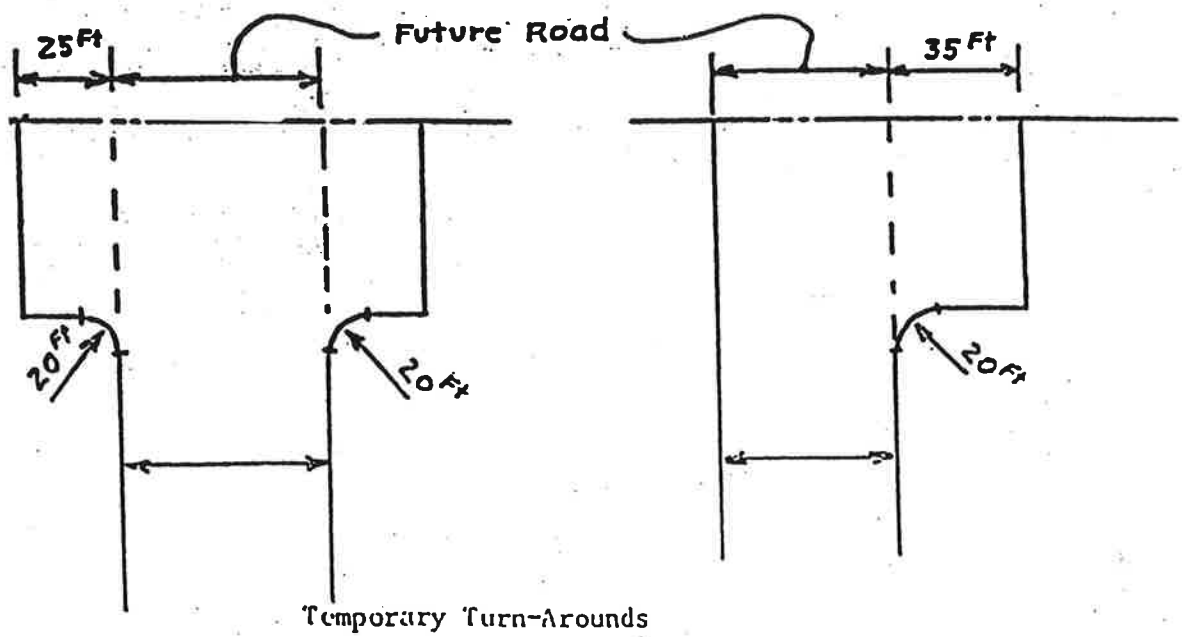
a. Streets entering opposite sides of another street shall be laid out either directly opposite each other or with a minimum offset of one hundred (100) meters (328.08 feet) between their centerlines. This minimum offset shall be observed whenever one or more streets entering opposite sides of another street are existing, whether located within or outside the boundary of the proposed subdivision.

b. Streets entering the same side of another street shall be laid out with a minimum distance of five hundred (500) meters (1640.42 feet) between their centerlines. This minimum distance shall be observed whenever one or more streets entering the same side of another street are existing, whether located within or outside the boundary of the proposed subdivision.

Typical Acceptable Turn-Arounds



Permanent Cul-de-Sacs



Temporary Turn-Arounds

Right-of-Way and Street Design Standards

Street Classification	Minor	Secondary	Major
-1 Minimum Right-of-Way Width (feet)	39.370 (12 m) or 49.212 (15 m) (See note 1)	49.212 (15 m) or 59.054(18 m) (See note 1)	72.178 (22 m)
-2 Minimum Pavement Width (Travelled Way) in feet	20,22,24,26 (See note 1)	24,26,28,30 (See note 1)	40 (See note 2)
-3 Minimum Radius of Curves (at Center line of Travelled Way) in feet	246.06 (75 m)	344.48 (105 m)	590.544 (180 m)
-4 Minimum Road Crown (in inches)	4	5	6
-5 Minimum Vertical and Horizontal Sight Distance in feet (See note 3)	150	250	450
-6 Minimum Percent Grade	1	1	1
- 7 Maximum Percent Grade	8 (See note 4)	8	5
-8 Roadway Shoulder from Edge of Pavement to Bottom of Slope in Substantial Cut (feet)	4	8 (See note 6)	3 (See note 5)
I -9 Roadway Shoulder from Edge of Pavement to Top of Slope in a Substantial Fill (feet); with Guard Rail	5	9	4 (See note 5)

Notes:
1. To be determined by Board at the review of the Preliminary Plan.
2. This includes two 12' travel lanes and two 8' paved shoulders.
3. Clear site distance in travel lane at 3.5 feet above pavement.
4. Ten percent may be allowed for short distances.
5. From outside edge of paved shoulder.
6. Actual width to be determined by Board.

4. Intersections

a. Rights-of-way shall be laid out so as to intersect as nearly as possible at right angles. No right-of-way shall intersect any other right-of-way at less than sixty (60) degrees. The vertical grade of the road shall not exceed a slope of four (4) percent for a minimum distance of thirty-five (35) meters (114.829 feet) from the intersection.

b. Where the angle of intersection varies more than ten (10) degrees from a right angle, the provisions of Section V.G.4.a. may be modified by the Board to meet site-specific conditions. Horizontal curves on the street centerline shall not begin or end within thirty-five (35) meters (114.829 feet) of the centerline of the intersecting street.

V.H. Adequate Access from Public Way

1. Where the street system within a subdivision does not connect with or have, in the opinion of the Board, adequate access from a Town, County or State public way, the Board may 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 of access to and within such a way, in accord with the provisions of these Regulations, either from the boundary of the subdivision to a Town, County or State public way, or along such public way for a distance which, in the opinion of the Board, is sufficient to provide adequate access to the subdivision.

2. Where the physical condition or width of a public way from which a subdivision has its access is considered by the 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 Board may require the subdivider to dedicate a strip of land for the purpose of widening the abutting public way to a width at least commensurate with that required within the subdivision, and to make physical improvements to and within such public way to the same standards required within the subdivision. Any such dedication of land for purpose of 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 borne by the subdivider.

V.I. Easements and Restrictions

1. Layout of Easements

a. Easements shall be continuous from lot to lot and from street to street unless, in the opinion of the Board, topography or other special conditions make such continuity impossible. Such easements shall be along rear or side lot lines; and shall create as few irregularities as possible.

b. Utility and drain easements (Use Form N appended hereto) shall follow lot lines, and shall be not less than six (6) meters (19.685 feet) in width.

c. Easements for different purposes (such as utility or drainage easements) may be adjacent, but shall not overlap or occupy the same area.

2. Conservation Restrictions

a. [**bold type** indicates amendment made on October 5, 1987] Watercourses, drainage ways, channels or streams shall be located within easements conforming substantially with the lines of their courses, whose width shall be not less than 19.685 feet (6 meters) and whose boundaries shall not be closer than two (2) meters (6.562 feet) horizontally from the one hundred year flood plain. Wetlands shall be located within easements whose boundaries shall be not closer than 100 feet from the boundaries of the wetlands. **No building shall be constructed and no paving or other activity shall be permitted within such easement except as permitted under the Zoning by-law, the Massachusetts Wetlands Protection Act, and any local wetlands bylaw.**

b. In any subdivision, the developer may grant to the Town a conservation restriction over any portion of the subdivision providing the area subject to the restriction has the approval of the Conservation Commission and the Board of Selectmen (Use Form M appended hereto).

3. Open Space

a. Before approval of a plan, the Board shall also require the plan to show a park or parks suitably located for playground or recreation purposes. The park or parks shall be of reasonable size, but not less than five (5) percent of the area of the land to be subdivided. The Board shall by appropriate endorsement on the plan require that no building may be erected on such park or parks without its approval for a period of not more than three years after the approval of the Definitive Plan. If this land is not conveyed to the Town of Shutesbury by sale or gift within three years after the approval of the Definitive Plan, then such land may be incorporated into a subsequent subdivision.

b. Land designated for open space or park purposes shall not include wetlands, ledge, or other land unsuitable for playground or recreation use.

c. Any open space, park, or playground shall be provided with a minimum of one hundred feet (100') continuous frontage on a street. Pedestrian ways will be required to provide access from each of the surrounding streets, if any, on which the open space, park, or playground has no frontage. Further, such parks and playgrounds may be required to have maintenance provided for by covenants and agreements acceptable to the Board, until such time (if any) as public acquisition may be accomplished by the community, but in no case longer than three (3) years.

V.J. Sewerage

1. Septic Disposal Systems

No lot shall be built upon without the provision of on-lot sewage disposal facilities specifically approved by the Board of Health.

2. Storm Sewers

a. Design storm intensity for surface runoff shall be calculated according to the methodology set forth in Technical Release Number 55, entitled "Urban Hydrology for Small Watersheds," by the Soil Conservation Service of the U.S. Department of Agriculture, or such other methodology as the Board may, in its discretion, approve. All tributary areas shall be assumed to be fully developed in accordance with the Zoning By-Law unless publicly owned or deed restricted. Water velocities in pipes and paved gutters shall be between two (2) and ten (10) feet per second, and not more than five (5) feet per second on unpaved surfaces. Facility design shall be as follows:

Street surface drainage (storm sewers, swales) -- 25 year storm
Detention basins -- 50 year storm
Watercourses, drainage ways, channels or streams -- 100 year storm
Culverts, bridges, other water crossings -- 100 year storm

b. Minimum size of pipe for surface runoff shall be twelve (12) inches ID. Footing drain and subdrain connection pipe size shall be a minimum of six (6) inches ID.

c. Connection of footing drain, roof drains, or storm drains to a septic disposal system is prohibited.

d. Maximum distance between manholes shall be 300 feet. Maximum distance for street runoff to travel along a berm or gutter to a catch basin shall be 300 feet. Maximum distance between a catch basin and manhole shall be 300 feet.

e. Catch basins will be placed at street intersections to intercept surface runoff, and will be placed to prevent water from crossing the streets.

f. Proper drainage design includes appropriate storm lines and channels to accommodate properties "upstream" and appropriate structures to preclude "downstream" damage to adjacent properties.

g. Where a portion of a subdivision lies within an aquifer recharge area, storm drainage shall be directed, when appropriate in the opinion of the Board, to retention basins in order to artificially recharge the ground system.

h. Peak stream flows and run-off at the boundaries of the subdivision development in a twenty-five (25) year storm shall be no higher following development than prior to development. This provision may, in the discretion of the Board, be waived by the Board following consultation with the Conservation Commission and consideration of the ability of receiving wetlands or waterbodies to absorb the increase and the consequences of providing detention capacity.

V.K. Water Supply

1. Water Wells

No lot shall be built upon without the provision of on-lot water facilities specifically approved by the Board of Health.

2. Fire Hydrants (See Section IV.C.12 for Contents of Definitive Plan)

a. Minimum distance from the buildings (except for the pump house as provided in this Section V.J.2) shall be forty (40) feet.

b. Maximum distance between hydrants shall be eight hundred (800) feet measured along the access route, provided however, that at least one hydrant shall be located on each street.

c. Minimum size of hydrant branch is six (6) inches ID (inside diameter).

d. Hydrants shall be supplied with water by a well or other water source (such as a pond within the subdivision with an all-weather way for access) provided by the subdivider, with pipes between hydrants and a pump capable of supplying to the hydrants one thousand six hundred (1600) gallons per minute for a period of at least twenty-four (24) hours. The pump and associated equipment shall be housed in a pump house with insulation and heating sufficient to protect the pump from freezing at temperatures down to -25 degrees Fahrenheit (-31.6 degrees Centigrade). One hydrant shall be located at the pump house.

e. Maximum distance from any structure to a hydrant shall be 500 feet measured along the street.

V.L. Solar Energy

The purpose of this Section V.L. is to encourage the use of solar energy systems and protect to the extent feasible the access to direct sunlight of solar energy systems. The applicant shall utilize passive solar energy techniques which maximize solar heat gain, minimize heat loss during the heating season and minimize heat gain and provide for natural ventilation during the cooling season. These passive solar energy techniques shall include, but are not limited to, the following:

1. The street and layout plan shall, as far as practicable, provide for east-west street orientations to facilitate the development of properly oriented passive solar buildings. For purposes of this regulation an east-west street refers to any street with its axis within thirty (30) degrees of true east.

2. In so far as practicable, side lot lines shall be perpendicular to the street line unless that purpose of the lot line orientation is to provide greater solar access protection.

3. The proposed principal building shall be located and oriented so that the longest side of the building faces within thirty (30) degrees of true south.

4. Proposed buildings shall be located to avoid shadows cast by other buildings, vegetation and natural and manmade topographical features whenever practicable.

5. Provided soil and topographic conditions permit, primary and reserve leaching fields shall be planned and located to the south of a proposed house location whenever such location enhances solar access to the south wall due to regrading and tree removal associated with the installation of the sewage disposal system.

6. Each lot within the subdivision shall be evaluated to determine if south wall solar access protection is available meeting any solar access requirements of the Zoning By-Law.

7. At the discretion of the Board, taking into consideration the need for solar access protection, the applicant shall be required to include solar easements or restrictive covenants with the deeds of each lot.

END OF SECTION V

(this page left blank intentionally)

SECTION VI. REQUIRED IMPROVEMENTS

VI.A. Basic Requirements

The subdivider shall provide all of the improvements required herein and installed at his/her own expense. All work done under this section shall be done under the direction of the Board, including registered engineer(s) and any other consultants appointed by the Board. The subdivider shall promptly reimburse the Town for the full amount of the cost of such engineer(s) and other consultants.

No performance guarantee under Section IV.D. shall be released until (1) all streets and all other improvements shall have been in place over at least one winter (December 1 through April 15); (2) full approval in writing of all work done under this section is received from the Board's engineer(s) and any other consultants; and (3) a cashier's check or money order, payable to "Town of Shutesbury, Massachusetts," has been received to provide reimbursement for the full amount of the cost of such engineer(s) and other consultants.

In addition to the Mass. DPW Construction Standards, the following minimum specifications shall govern the installation of all roadways, utilities, and other improvements in all subdivisions.

VI.B. Clearing and Grubbing Right-of-Way

Trees over eight (8) inches diameter located at least 5 feet from the proposed edge of pavement shall require permission of the Board if removal is desired by the developer. All other trees, shrubs, stumps, brush, roots, boulders, and like material shall be removed within the right-of-way as dictated by sound design and landscaping.

VI.C. Responsibility

The responsibility for adequate drainage shall rest with the developer. This shall include the risk involved in connecting with existing drainage facilities (if any) provided by the Town.

Where property adjacent to the subdivision, but within the same watershed, is not subdivided, provision shall be made for proper projection of the drainage systems by continuing appropriate drains and easements to the exterior boundaries of the subdivision at such size and grade as will allow for such projection. Drainage rights which are appropriate, sufficient, and necessary to handle drainage from the subdivision and adjacent areas shall be secured for the Town.

VI.D. Sewage Disposal Facilities

A Definitive Plan may be approved without provision of sanitary sewers, provided that no lot shall be built upon without the provision of on-lot sewage disposal facilities specifically approved by the Board of Health in conformity with the regulations of said board as promulgated and amended from time to time.

VI.E. Water for Other than Fire Fighting Purposes

A Definitive Plan may be approved without provision of water lines (except required lines to fire hydrants) provided that no lot shall be built upon

without the provision of on-lot water facilities specifically approved by the Board of Health in conformity with regulations of said Board as promulgated and amended from time to time.

VI.F. Utilities

All gas, telephone, electricity, cable antenna, television, and other utility lines shall be installed underground. If located within a one hundred year flood plain, transformers, switching equipment, and all other components shall be flood proofed and approved by a registered engineer appointed by the Board. The subdivider shall promptly reimburse the Town for the full amount of the cost of such engineer.

VI.G. Road, Berm, and Curb Cuts

Wherever a sidewalk or bicycle path intersects a roadway, curb cuts shall be provided. Roadways, berms, curbs, curb cuts, and shoulders will be constructed in accordance with State Construction Standards.

VI.H. Sidewalks and Bicycle Paths

Unless the Board determines that pedestrian movement is otherwise provided for, sidewalks having a width of not less than five (5) feet shall be constructed between the roadway and the right-of-way line, as close to said line as practicable, and generally parallel with the roadway. All streets shall be provided with sidewalks on both sides. Pedestrian access other than by routes parallel with roadways may be permitted, provided easements are established.

The Planning Board may require bicycle paths from four (4) to eight (8) feet in width within a subdivision. In certain cases, at the discretion of the Planning Board, all or part of the sidewalk requirement may be waived where bicyclepaths are provided.

VI.I. Groundwater Drainage

As construction progresses, unforeseen groundwater conditions may be encountered which require additional subdrains or curtain drains. These conditions include potential problems if construction is in progress at a time of low water table or other dry conditions. The Board reserves the right to require appropriate systems to accommodate the problem.

VI.J. Retaining Walls

Retaining walls shall be installed where deemed necessary by the Board and they shall be designed by a registered engineer.

VI.K. Fire Hydrants

Fire hydrants and associated equipment shall be installed in accordance with the provisions of Sections IV.C.12 and V.J.2.

VI.L. Trees and Plantings

1. Existing Trees

Trees on the site, especially those over twelve (12) inches in diameter should be preserved. Following is a list of recommended measures for the protection of trees:

a. There should be no operation of heavy equipment or storage of any materials under said tree within its natural drip line.

b. Wherever possible no grading or filling should be done within the drip line.

c. Supplemental irrigation should be provided to all trees as needed during the summer months to insure healthy maintenance.

d. No black top paving or vehicle parking should be located under evergreen trees. No more than twenty (20) percent of the area under any deciduous tree's natural drip line may be so paved.

e. All drainage from paved areas should be directed away from root zones.

2. Street Trees

a. The subdivider is required to plant suitable broadleaved deciduous shade trees along roads, or ways, unless specifically exempted by the Board. All trees shall be the equivalent of well-rooted nursery-grown stock free of injury, harmful insects, and diseases. They shall be well-branched, and the branching structure should be sound.

b. Acceptable types of street trees may be selected from a list appended to these regulations, which includes large-growing, medium growing, and small-growing deciduous trees.

c. Large growing trees shall be spaced at intervals of 45 to 55 feet, medium-growing trees at intervals of 30 to 40 feet, and small-growing trees at intervals of 20 to 30 feet. Trees on one side of the street may be set either opposite or diagonally to trees on the opposite side. If overhead wires are present, large- or medium-growing trees to be planted along the same side as such wires should be planted within the set-back area of the property rather than adjacent to the paved way. Small-growing trees with low-branching characteristics should be planted within the front yard set-back area in all cases.

d. Minimum acceptable sizes of trees to be planted shall be as follows:

Large-growing--2 1/2" trunk diameter, caliper at 1' above ground
Medium-growing--2 1/2" trunk diameter, caliper at 1' above ground
Small-growing--9' crown height, 5' spread

e. Planting operations shall be as specified in Section 8, Subsections A, C, E, and F of the Recommended Standard Specifications for Planting Trees, Shrubs, and Vines--Associated Landscape Contractors of Massachusetts.

f. Requirements for support stakes, guy wire and cable, ground anchors, hose, and wrapping material shall be those contained in Section 6 of the Recommended Standard Specifications for Planting trees, Shrubs, and Vines, compiled and issued by the Associated Landscape Contractors of Massachusetts, Inc.

g. The subdivider shall be responsible for maintenance of planted trees and replacement of those which have died or become diseased from the time of planting through one full growing season.

3. Bank Plantings

a. All cut or fill bankings that tend to wash or erode shall be planted with suitable, well-rooted, and low-growing plantings. All plants shall be the equivalent of nursery grown stock in good health, free from injury, harmful insects, and diseases.

b. Acceptable planting types may be selected from a list in the Planning Board office in the Town Hall, which includes very low-growing (4" to 12"),low growing (12" to 30"), and herbaceous plantings. Perennial grass turf installed as sod is an acceptable alternative for the planting of banks.

c. If bank plantings are of a type which are properly spaced at close intervals, 8" to 12" of loam shall be spread over the entire bank. If the plantings are to be widely spaced they may be planted in loam pits.

d. Mulch (wood chips or equal) shall be spread heavily among plantings for weed and erosion control.

e. The subdivider shall be responsible for maintenance of bank plantings and replacement of those which have died or become diseased from the time of planting through one full growing season.

4. Corner Plantings

Requirements for plantings adjacent to street intersections shall be the same as those for Bank Plantings with the following exceptions:

a. Turf may be provided by seeding as well as by planting sod.

b. Bushy shrubs and herbaceous plantings that would tend to obscure visibility are not permitted within one hundred (100) feet of the intersection of the curbs adjacent to the corner lot.

5. Cul-de-Sac Plantings

The central portion of a permanent dead-end street should be landscaped. The following options are permitted:

a. Planting with ground cover such as those listed in Section VI.L.3.b. using an 8" to 12" base of loam, and spreading mulch between plants for weed control.

b. Planting perennial grass by either sod or seed.

c. Planting ornamental shrubs of a type acceptable to the Board.

d. Retaining existing vegetation, with the approval of the Board.

e. Standards and Specifications

The standards of the American Nurserymen Association and the specifications of the Associated Landscape Contractors of Massachusetts shall apply to landscaping subject to these regulations.

6. Grass Strips

All cleared areas of a right-of-way, not to be planted with groundcover 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 lawn grass seed. Seeding shall be done at appropriate times of the year and in a manner to insure growth of grass. No utility poles, transformers, signs, or similar items shall be placed within the grass plot within three (3) feet of the edge of the pavement.

VI.M. 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.

VI.N. Street Lights

Installation of street lights shall be governed by current Town practice.

VI.O. Guard Rails

Guard rails shall be installed as required by the Board or its engineering consultant, based on State Construction Standards or the publications of the American Association of State Highway and Transportation Officials (AASHTO).

VI.P. Bounds and Lot Corners

Bounds shall be set on both sides of each proposed street at all angle points, at the beginning and end of all curves thereof, and at all intersections of streets and ways with each other or with Plan boundary lines. The bounds shall be of stone or reinforced concrete, shall be not less than four (4) feet in length and not less than six (6) inches in width and breadth and shall have a drill hole in the center. All bounds shall be set flush with the surface of the adjoining ground. Wrought iron rods may be used where the points fall on exposed ledge. The placement and accurate location of these bounds shall be certified to by the Registered Land Surveyor of the developer by a letter which shall be submitted with the As-Built Plan. Entrances to subdivisions shall not be marked by elaborate monuments. Lot corners in the subdivision shall be set in a manner similar to the setting of the bounds. These corners or points of deflection will be marked with iron pins (or equal) as permanent markers. The same certification is required as in the case of the bounds. Use of the Massachusetts Coordinate System is encouraged.

VI.Q. As-Built Plan

After construction of all improvements is completed, and before release of the Performance Guarantee, the subdivider shall prepare and submit to the Board three copies of the Definitive Plan, revised in an As-Built Record Plan at a scale of one inch equals forty feet (1" = 40'), which shall indicate the location of the following as built:

1. Street lines, showing centerline elevations at fifty (50) foot intervals;

2. Edge of traveled way, locations of paths and sidewalks;

3. All permanent monuments and all bounds;

4. Location and inverts of drainage system and any utilities required to be installed by the developer;

5. Location of all other underground utilities (such as electricity and telephone); and

6. All other improvements required by these Regulations or agreed upon as a condition to plan approval.

The accuracy of such record plan shall be certified by a registered professional land surveyor.

As part of the As-Built Plan, the developer shall submit to the Board a certification, by a registered engineer appointed or approved by the Board, in which said engineer certifies that all construction was executed strictly in accordance with these Regulations and with all requirements agreed upon as a condition to plan approval.

VI.R. Final Cleaning

Upon completion of the work, the subdivider shall remove from the highway and adjoining property all temporary structures, surplus material, and rubbish which may have accumulated during the execution of the work, and shall leave the subdivision area in a neat and orderly condition. Burning or burying of the rubbish and waste material is prohibited.

VI.S. Inspections of Improvements

Inspections during the work shall be arranged with a registered engineer appointed by the Board prior to starting construction, who will provide the subdivider with a checklist covering these inspections. The Board's engineer will sign this checklist after satisfactory completion of each step by the developer. Inspections shall be requested at least 48 hours in advance of each inspection by notice to the Board's engineer. Inspections shall be made after each step indicated above. All weight slips for bituminous material shall be furnished to the Board's engineer on request (See Form L appended hereto).

(this space left blank intentionally)

END OF SECTION VI

SECTION VII. ADMINISTRATION

VII.A. Authority

1. The Board shall be the administrative agency of these regulations and shall have all the powers assigned them by Sections 81A through 81G of Chapter 41 of the General Laws.

2. The Board may assign as their agents appropriate Town agencies or officials, and may hire consultants with the full cost of consulting services to be reimbursed to the Town by the subdivider.

3. The Board on its own motion or on the petition of any interested person shall have the power to modify, amend or rescind its approval of a Plan of a subdivision, or to require a change in a Plan as a condition of its retaining the status of an approved Plan (see Section IV.K. of these Regulations).

VII.B. 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 intent of the Subdivision Control Law. In waiving strict compliance, the Board may require such alternative conditions as will serve substantially the same objective as the standards or regulations waived.

VII.C. Inspection and Reimbursement for Consulting Services

1. Inspection shall be carried out at appropriate times during the development of the subdivision as described in Section VI.S. and in the Subdivision Inspection Checklist (Form L appended hereto). The subdivider shall notify the Board, or an engineer appointed by the Board, at east 48 hours before carrying out each operation to be inspected.

2. The Board may make arrangements with consultants to carry out such inspection on behalf of the Town.

3. In accordance with section 53G of chapter 44 of the General Laws, the costs of inspection shall be borne by the subdivider and shall be reimbursed to the Town by certified check or money order payable to the "Town of Shutesbury, Massachusetts." Inspection costs shall include but not be limited to: on-site inspections, "portal-to-portal" travel, off-site analysis of plans, water testing, and soil testing. Said reimbursement shall be paid prior to endorsement of the As-Built Plan.

4. Failure to pay any reimbursement provided in these Regulations at the stated time, or within thirty (30) days following mailing of an invoice, whichever is earlier, shall be sufficient grounds for the Board to disapprove or rescind its approval of a Preliminary Plan or Definitive Plan of a subdivision. In addition, no performance guarantee shall be released by the Town until the Board of Selectmen determine that all reimbursements have been paid in full by certified check or money order, payable to "Town of Shutesbury."

5. The developer has the responsibility to insure that the approved construction plans are implemented. Use of qualified persons to furnish adequate and timely engineering supervision during construction is required. Surveillance and field revisions by Town officials or consultants appointed by the Board cannot be construed as fulfilling this responsibility.

VII.D. Separability

If any section, paragraph, sentence, clause, provision, phrase or word of these Regulations shall be adjudged not valid, the adjudication shall apply only to the material so adjudged and the remainder of these Regulations shall be deemed to remain valid and effective.

VII.E. Amendments

These Regulations or any portion thereof may be amended, supplemented or repealed from time to time by the Board after a public hearing, with notice as provided by law, on its own motion or by petition.

VII.F. Invalidation by State Law

Any part of these Regulations subsequently invalidated by a new state law or modification of an existing state law shall automatically be brought into conformity with the new or amended law, and shall be deemed to be effective immediately, without recourse to a public hearing and the customary procedures for amendment or repeal of such regulations.

VII.G. Forms and other information
[**bold type** indicates amendment made on October 5, 1987] **Appended to the Regulations hereto are sample forms for the administration of these Regulations. The administrative content of these forms may be revised from time to time by administrative action of the Board apart from Section VII.E. The Table of Contents also may be amended by administrative action apart from Section VII.E. As an administrative matter at the discretion of the Board, other information, including but not limited to other local bylaws and regulations, may be included with copies of these regulations.**

VII.H. Additional References

State Sanitary Code, particularly Title 5
Massachusetts Department of Public Health
Rules and Regulations
Board of Health, Shutesbury, Massachusetts

Standard Specifications for Highways and Bridges
Massachusetts Department of Public Works

Test Designation T99 (Method C)
American Association of State Highway Officials (AASHO)

A Policy on Geometric Design of Highways and Streets
American Association of State Highway and Transportation Officials (AASHTO)

Land Court Manual of Instructions for Land Surveys

Massachusetts Engineering Department

Recommended Standard Specifications for Planting Trees, Shrubs, and Vines, and Fine Grading and Seeding Lawns
The Associated Landscape Contractors of Massachusetts, Inc.

Standards of the American Nurserymen Association

The Hatch Act, General Laws, Chapter 131, Section 40 and current amendments

Luna B. Leopold and others, A Procedure for Evaluating Environmental Impact, U. S. Department of the Interior, Geological Survey (Washington, DC: 1971)

END OF SECTION VII

(this page left blank intentionally)

SECTION VIII. DEVELOPMENT IMPACT STATEMENT

A Development Impact Statement (DIS) is a documented, written analysis of a proposed development which provides the Planning Board and Town officials with information necessary for plan review. The conservation analysis described in Subsection IX below should be submitted, if possible, prior to formal plan submission, for informal pre-application discussion with the Planning Board.

The DIS shall be prepared by an interdisciplinary team of professionals qualified to evaluate all facets of the proposed project which may include by is not limited to engineers, architects, landscape architects, environmental scientists, and planners.

It is a developer's responsibility to prepare and document the DIS in sufficient detail to permit an adequate evaluation by the Planning Board; however, additional data may be requested in writing by the Board. This is one reason why it is to the advantage of the developer to prepare and submit to the Board a preliminary plan including a draft DIS. It is necessary to respond to all sections of the DIS form, except when a written exemption is granted by the Planning Board.

NAME OF PROJECT:
TYPE OF PROJECT:
LOCATION:
PARCEL NUMBER(S):
ZONING DISTRICT(S):

ACREAGE:
OWNER(S):
PLANNER:
ENGINEER:
ARCHITECT:

I. PROJECT DESCRIPTION

a. Number of Units:
Total_____ Low Income_____ Single Family_____
Two Family_____ Row House_____ Apartment_____
Commercial _____ Other_____

b. Type of Ownership (list number of units for each):
Condominium_____ Rental_____ Private_____ Lease _____

c. Number of Bedrooms:
Row Houses_____ Condominium_____ Apartments_____

d. Approximate Price per Lot/Unit:
Private_____ Condominium_____ Rental_____ Lease _____

II. CIRCULATION SYSTEMS

a. Street Design - Explain reasons for location of streets, stubs, and intersections.

b. Street Classification and Traffic - Classify the streets and stubs within the development according to the street classification set forth in Section II.A.9 of these Regulations. Project the number of motor vehicles to enter or depart the site per average day and peak hour. Also state the number of motor vehicles to actually pass by streets adjacent to the proposed

subdivision per average day or peak hour. data shall be sufficient to enable to Board to evaluate (1) existing traffic on streets adjacent to the proposed project, (2) traffic generated or resulting from the proposed project, and (3) the impact of such additional traffic on all ways within and adjacent to the proposed project. Attach to this DIS the results of all studies conducted to develop these data, plus a description of the study methodology, and the name, address and telephone number of the person(s) responsible for carrying out the study.

c. Parking and Bus Stops - Discuss the number, opportunities for multiple use, and screening of parking spaces. With respect to bus stops (if any), explain the location, shelter design, and orientation to path systems.

d. Pedestrian and Bicycle Circulation - Discuss the orientation of the pedestrian and bicycle system to activity centers, location of bike racks (if any) and any bike path plans.

III. SUPPORT SYSTEMS

a. Water Distribution - Discuss the types of wells proposed for the project, means for providing fire supply, and any special problems which might arise.

b. Sewage Disposal - Discuss the type of system, level of treatment, suitability of soils and results of percolation tests, deep observation holes and test borings. Identify groundwater flow fields in the area of the proposed subdivision, establish the capability of the soil to renovate sewage effluent, and determine the dilution effects on the effluent through recharge (mainly precipitation) and dispersion. A computer simulation shall be provided.

c. Storm Drainage - Discuss the storm drainage system including the projected flow from a 50 year storm, name of the receptor stream, and any flow constrictions between the site and the receptor stream.

d. Refuse Disposal - Discuss the location and type of facilities, hazardous materials requiring special precautions, and screening.

e. Lighting - Discuss the location and size of lights, and methods used to screen adjoining properties from glare.

f. Fire Protection - Discuss the type and capacity of fuel storage facilities, location of storage areas for hazardous substances, special requirements, and distance to fire station.

g. Recreation - Indicate the distance to, and type of, any public facilities. Discuss the type of private recreation facilities to be provided with the development.

h. Schools - Project the student population of the project for the nursery, elementary, Junior High School and Senior High School

levels and indicate the distance, capacity, and present enrollment of the nearest elementary and secondary schools. Describe the basis or methodology for all projections of student population.

IV. NATURAL CONDITIONS - Describe the following elements of natural conditions, identifying short-term (those occurring primarily during project construction) and long-term (those remaining after the completion of project construction) impacts on each:

a. Topography - Indicate datum, source, date, slopes greater than 15%; provide contours at two-foot intervals, with graphic drainage analysis showing annual high-water mark; show location of existing structures, including fences and walls.

b. Soils - Indicate soils and land types, utilizing all government soil surveys covering the project area, including but not limited to prime agricultural land, depth to bedrock, and extent of land which has been filled.

c. Mineral resources - Indicate extent and economic importance of mineral resources, extent and means of proposed extraction, and rehabilitation measures.

d. Surface geology

e. Depth to water table (groundwater level) - Show location and provide test results of soil percolation or other subsurface tests for each lot in a proposed subdivision.

f. Aquifer recharge areas

g. Wetlands

h. Watercourses

i. One hundred year flood plains

j. Wildlife - Describe species present and estimate numbers of each; identify endangered species.

k. Vegetative cover - Provide an analysis of vegetative cover, including identification of general cover type (including but not limited to wooded, open areas, cropland, wetlands, etc.); show location of all tree groupings and identify such groupings by major or dominant species; show location of and describe wildlife habitats; identify endangered species; identify unusual habitats, meaning those not commonly found in the Connecticut River Valley in Franklin County, Massachusetts.

V. DESIGN FACTORS - Describe briefly the following features. Photographs are helpful.

a. Present visual quality of the area

b. Location of significant viewpoints

c. Historic structures

d. Architecturally significant structures

e. Type of architecture for development

VI. ENVIRONMENTAL IMPACT - This section shall deal separately with both short term and long term impacts. A narrative statement shall be submitted, documenting all mitigative measures taken to:

a. Prevent surface water contamination, changes in surface water level, or both.

b. Prevent ground water contamination, changes in ground water level, or both.

NOTE: As part of items a. and b. above, estimate phosphate and nitrate loading on ground water and surface water from septic tanks, lawn fertilizer, household gardens, landscaping, and other activities within the development.

c. Maximize ground water recharge

d. Prevent air pollution

e. Prevent erosion, sedimentation, or other instability in soils or vegetative cover.

f. Maintain slope stability

g. Reduce noise levels

h. Preserve significant views

i. Design project to conserve energy

j. Preserve wildlife habitats, botanical features, scenic or historic features

k. Ensure compatibility with surrounding land uses

l. [**bold type** indicates amendment made on October 5, 1987] **Protect wetlands and floodplains, and ensure compliance with the Wetlands Protection Act and any local wetlands bylaw.**

m. Promote lot layout and house siting for potential solar energy capabilities

n. Minimize or avoid all short-term and long-term impacts identified in Section IV. of the DIS ("Natural Conditions") and not otherwise covered in this section.

VII. PLANS - Describe how the project relates to the following:

a. Village concept and any village plans

b. Any conservation or Town master plan

c. Any regional plans prepared by county or regional planning agencies

VIII. PHASING

If the development of the site will take place over more than one year, supply a schedule showing how the development will be phased. A flow chart is helpful. This time table shall include the following elements:

a. Stripping or clearing of site, or both

b. Rough grading and construction

c. Construction of grade stabilization and sedimentation control structures

d. Final grading and vegetative establishment

e. Landscaping

f. The construction of any public improvements shall be specified explaining how these improvements are to be integrated with the development.

g. The number of housing units and the square footage of nonresidential uses to be constructed each year and their estimated value shall be specified.

IX. CONSERVATION ANALYSIS

a. A conservation analysis shall be submitted as early as possible in the application process, preferably as part of the pre-application discussion process with the Planning Board which occurs prior to submission of plans. The conservation analysis shall consist of inventory maps, description of the land, and an analysis of the conservation value of various site features. This material shall show the following information on the parcel and on land lying within 100 feet of the boundaries of the parcel. The information required below may be waived for portions of the property which will remain unaltered by the proposed development or where the Planning Board deems such information not to be necessary to making an informed decision.

1. All information required by subsection IV, except IV(c) and IV(e), and by subsections V(a) through (d) above.
2. Farmland, existing trail corridors, scenic viewsheds, public water supply and lake watersheds, park and recreation land, wooded areas, and historic and archaeological sites identified in the Town's Master Plan or Open Space and Recreation Plan
3. Lakes, ponds, and BioCore habitat, as mapped by the Commonwealth of Massachusetts
4. Slopes exceeding 20%
5. Buffer areas necessary for screening new development from

adjoining parcels and public roads

6. Stone walls and old foundations

7. Other land exhibiting present or potential future recreational, historic, ecological, agricultural, water resource, scenic or other natural resource value, if specifically identified and requested to be shown by the Planning Board at the discussion meeting.

b. The conservation analysis shall describe the importance and the current and potential conservation value of land on the site identified in subsection a. above. In the course of its initial review, the Planning Board shall indicate to the applicant which of the lands identified have the most conservation value and are most important to preserve and where development may be most appropriately located. If the Planning Board determines, pursuant to the provisions of Article V of the Town of Shutesbury Zoning Bylaw, that the lands of conservation value cannot be protected except by the use of an open space design plan, the Planning Board shall indicate to the applicant that the applicant must submit a plan for an open space design.

c. The Planning Board shall, in the course of its subdivision review, study the conservation analysis and formally determine which land should be preserved and where development may be located. The Planning Board shall make written findings supporting this determination (the "conservation findings"). The Planning Board shall deny any application that does not include sufficient information to make conservation findings or that does not preserve land that the Planning Board determines should be preserved from development as a result of the conservation analysis and findings.

d. The final determination as to which land has the most conservation value and must be protected from development by a Conservation Restriction shall be made by the Planning Board.

e. The Planning Board's conservation findings shall be incorporated into its decision to approve or deny a Preliminary Plan, or a Definitive Plan if no Preliminary Plan is submitted. The conservation findings shall show land to be permanently preserved by a Conservation Restriction, as well as recommended conservation uses and management guidelines for such land. The conservation findings shall also indicate preferred locations for development if the Plan is denied based upon such findings.

END OF SECTION VIII

(this page left blank intentionally)