

TOWN OF SCITUATE

RULES AND REGULATIONS
GOVERNING
THE SUBDIVISION
OF LAND

SCITUATE PLANNING BOARD
AUGUST 13, 2010

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SECTION 1.0 PURPOSE AND AUTHORITY

1.1 PURPOSE

These Rules and Regulations have been enacted for the purpose of protecting the safety, convenience and welfare of the inhabitants of the Town of Scituate by regulating the layout 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 Appeals 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;

*Lessening congestion in such ways and in the adjacent public ways;

*Reducing danger to life and limb in the operation of motor vehicles;

*Securing safety in the case of fire, flood, panic and other emergencies;

*Ensuring compliance with the applicable zoning of the Town of Scituate;

*Securing adequate provision for water, sewage, drainage, underground utility services, fire, police and other municipal equipment, street lighting and other requirements where necessary in a subdivision;

*Coordinating the ways in a subdivision with each other, with the public ways in the Town of Scituate, and the ways in neighboring subdivisions; and

*Ensuring conformance to the recommendations of the Board of Health.

The Planning may regulate for all of the purposes set forth in the Subdivision Control Law, particularly G.L. c. 41, ss. 81M and 81Q, without limitation, and the following additional purposes:

*To implement the Planning Board's development objectives, policy decisions, and design standards.

*To provide the Planning Board with information reasonably necessary to perform its duties pursuant to statute.

*To regulate the submittal, review, and certification of plans believed not to require subdivision approval.

1.2 AUTHORITY

These Rules and Regulations governing the subdivision of land have been adopted by the Planning Board of the Town of Scituate, pursuant to authority vested in said Board by G.L. c. 41, s. 81Q.

1.3 AMENDMENT

These Rules and Regulations or any portion thereof may be amended, supplemented, or repealed from time to time by the Board, after a public hearing, on its own motion or by petition, all pursuant to G.L. c. 41, s. 81Q.

1.4 SEVERABILITY

The invalidity of any section, subsection or provision of these Rules and Regulations shall not invalidate any other section, subsection or provision thereof. If any provision of these Regulations is held by any court of competent jurisdiction to be invalidly applied to any particular case, all other applications of such provisions to other cases shall not be affected thereby.

SECTION 2.0 DEFINITIONS

For the purposes of these Rules and Regulations the following words and terms used herein are hereby defined or the meaning thereof explained, extended, or limited as stated in G.L. c. 41, as amended. Where a term is defined in the Subdivision Control Law or the Scituate Zoning By-Law and not herein, such definition shall be incorporated by reference herein. Other terms or words or phrases shall be construed according to the common and approved usage of the language, but technical words and phrases and such other terms or phrases as may have acquired a particular and appropriate meaning in law shall be construed and understood according to such meaning. All references to departments, boards and commissions shall be taken to mean the department, board or commission of the Town of Scituate.

Applicant: All owners of the land referred to in an application filed with the Planning Board, or the owner's duly authorized representative. Such representatives shall submit a letter of authorization from the record owner(s) of the land.

Board: The Planning Board of the Town of Scituate.

Dead-End Street: A street or a combination of streets which has only one means of ingress from or egress to a major, secondary or minor street.

Department of Public Works: The Department of Public Works of the Town of Scituate.

Director of Public Works: The Director of the Department of Public Works of the Town of Scituate, or his or her designee.

Easement: A right acquired by a public authority or other person for use or control of property for utilities, travel, or other designated public or private purpose.

General Laws or G.L.: The General Laws of the Commonwealth of Massachusetts, as amended.

Lot: An area of land in one ownership, with definite boundaries, used, or available for use, as the site of one or more buildings complying with the area, frontage and other requirements of the Zoning By-laws of the Town of Scituate.

Lot Frontage: That portion of a lot fronting upon and having rights of access to a way providing legally sufficient frontage for a division of land under the requirements of MGL Ch. 41, Sec. 81L, to be measured continuously along a single street line, through which access is attainable to the lot.

MassHighway Standards: The latest revisions of the *Standard Specifications For Highways and Bridges* and Construction Standards of the Massachusetts Highway Department.

Owner: The owner of record as shown by the records in the Plymouth

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County Registry of Deeds or Land Court Registry.

Parcel: An area of land in one ownership, with definite boundaries, not available for use as the site of one or more buildings.

Person: An individual, two or more individuals, a partnership, association or corporation having a common interest in a tract of land.

Plan, Definitive: A plan of a proposed subdivision or resubdivision submitted in accordance with these Rules and Regulations and with G.L. c. 41, s. 81T.

Plan, Preliminary: A plan of a proposed subdivision or resubdivision submitted in accordance with these Rules and Regulations and with G.L. c. 41, s. 81S.

Profile: A vertical section generally taken along the centerlines of streets, including storm drainage, water and sanitary sewage facilities.

Registered Mail: Registered or certified mail.

Registry of Deeds: The Registry of Deeds in Plymouth County, including when appropriate, the recorder of the Land Court.

Roadway: That portion of a street intended for vehicular use.

Rules and Regulations: The Rules and Regulations Governing the Subdivision of Land in Scituate, Massachusetts, as most recently adopted by the Scituate Planning Board pursuant to G.L. c. 41, 81O.

Scenic Road: Any road in the Town of Scituate designated a Scenic Road under the provisions of G.L. c. 40, s. 15C by a vote of Town Meeting.

Street, Major: A street which, in the opinion of the Board, is being or will be used as a thoroughfare between different portions of the Town of Scituate, or between towns, or which will otherwise carry a heavy volume of traffic (generally, over 2,000 vehicles per day).

Street, Minor: A street which, in the opinion of the Board, is being or will be used primarily to provide access to abutting lots, and which is designed to discourage its use by through traffic.

Street, Secondary: A street intercepting one or more minor streets and which, in the opinion of the Board, is being or will be used to carry a substantial volume of traffic (generally, over 1,000 vehicles per day).

Subdivision: The division of a tract of land into two or more lots and shall include resubdivision, and, when appropriate to the context, shall relate to the process of subdivision or the land or territory subdivided; provided, however, that a division of a tract of land into two or more lots shall not be deemed to constitute a subdivision within the meaning of the subdivision control law if, at the time when it is made, every lot within the tract so divided has frontage on (a) a public way or a way which the clerk of the city or town certifies is

maintained and used as a public way, or (b) a way shown on a plan theretofore approved and endorsed in accordance with the subdivision control law, or (c) a way in existence when the subdivision control law became effective in the city or town in which the land lies, having, in the opinion of the Planning Board, sufficient width, suitable grades and adequate construction to provide for the needs of vehicular traffic in relation to the proposed use of the land abutting thereon or served thereby, and for the installation of municipal services to such land and the buildings erected or to be erected thereon. Such frontage shall be of at least such distance as is then required by zoning or other ordinance or by-law, if any, of said city or town for erection of a building on such lot, and if no distance is so required, such frontage shall be of at least twenty feet. Conveyances or other instruments adding to, taking away from, or changing the size and shape of lots in such a manner as not to leave any lot so affected without the frontage above set forth, or the division of a tract of land on which two or more buildings were standing when the subdivision control law went into effect in the city or town in which the land lies into separate lots on each of which one of such buildings remains standing, shall not constitute a subdivision.

Subdivision, Type I: A subdivision in which the area and width at the building setback line of each lot equals or exceeds forty thousand (40,000) square feet and one hundred seventy-five (175) feet respectively, or where, in the opinion of the Board, the predominant lot area and average lot width equals or exceeds said amounts.

Subdivision, Type II: A subdivision in which the area and width of each lot equals or exceeds twenty thousand (20,000) square feet respectively, or where, in the opinion of the Board, the predominant lot area and average lot width equals or exceeds said amounts.

Subdivision, Type III: A subdivision in which the area and/or width of lots is less than for a Type II subdivision.

Subdivision, Type IV: A subdivision in which the area being subdivided is zoned for business, commercial and/or industrial purposes.

Subdivision Control Law: Sections 81K through 81GG, inclusive, of Chapter 41, Massachusetts General Laws, as amended.

Town: The Town of Scituate, Massachusetts.

Utilities: Sewers, water pipes, storm drains, gas pipes, electrical lines, cable or telephone lines, fire alarm systems and their respective appurtenances.

Wetlands: All land defined as wetland pursuant to G.L. c. 131, s. 40, and the Town of Scituate Wetlands Protection Bylaw, General Bylaws Section 30700, as may be amended, not including buffer zones, as defined through an Abbreviated Notice of Intent or Notice of Intent approved by the Conservation Commission.

Zoning By-Law: The Zoning By-law of the Town of Scituate.

SECTION 3.0 GENERAL REGULATIONS

The following regulations shall apply in all circumstances governed by the Subdivision Control Law.

3.1 APPLICABILITY

Any person desiring to divide or subdivide land shall, before proceeding with the improvement or sale of lots in the division or subdivision, or the construction of ways, or the installation of municipal services therein, submit to the Board a plan of such division or subdivision pursuant to the Subdivision Control Law and secure approval by the Board as hereinafter provided.

3.2 APPLICATIONS AND OTHER REQUIRED SUBMITTALS

All applications for approval or endorsement, required plans, required submittals, and required fees shall comply in all respects with the provisions of these Rules and Regulations. No application or plan shall be acted upon by the Board until said plan, together with all required accompanying applications, forms, fees, lists and other items have been delivered by the applicant, and are properly executed and fully completed in accordance with these Rules and Regulations. Where the applicant fails to comply with these Rules and Regulations, the Planning Board may reject the application and such application shall be deemed not submitted.

3.3 COMPLIANCE WITH THE BOARD'S RULES AND REGULATIONS

A proposed division and/or subdivision of land shall comply in all respects with these Rules and Regulations, unless the Board authorizes a waiver therefrom in specified and authorized instances.

3.4 WAIVERS

Strict compliance with these Rules and Regulations governing the subdivision of land may be waived when, in the judgment of the Board, such action is in the public interest, not inconsistent with the Subdivision Control Law, and promotes public health and safety.

3.5 ISSUANCE OF BUILDING PERMITS

The Building Inspector shall not issue any permit for erection of a building until first satisfied (a) that the lot on which the building is to be erected is not within a subdivision, or (b) that a way furnishing the access to the lot within a subdivision as required by the subdivision control law is shown on a recorded plan and that any conditions endorsed thereon limiting the right to erect or maintain buildings on such lot have been satisfied, and (c) that all other applicable requirements have been met.

3.6 PROFESSIONAL AND TECHNICAL ASSISTANCE

The Board may request technical assistance from town officials, and may hire professional assistance to review plans and inspect improvements at the cost of the applicant.

3.7 FEES

The fees indicated in **Appendix A, Application and Review Fees** shall accompany the submittal of application materials of the various plans specified in the Rules and Regulations, to cover costs of processing, technical review, and inspection.

3.8 MODIFICATION, AMENDMENT, OR RESCISSION OF SUBDIVISIONS

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, after due notice and opportunity to the owner to be heard in accordance with G.L. c. 41, s. 81W, as amended.

3.9 DWELLING LIMITATION

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.

3.10 ACCESS ADEQUACY REGULATIONS

3.10.1 General.

Plans shall be endorsed as not requiring approval under the Subdivision Control Law and subdivision plans shall be approved only if each building lot to be created by such plan has adequate access as intended under the Subdivision Control Law, G.L. c. 41, ss. 81K - 81GG.

3.10.2 Standards of Adequacy.

1. **To an ANR Site.** Ways providing access to lots developed pursuant to G.L. c. 41, s. 81P shall normally be considered adequate for access if said way has, in the opinion of the Board, sufficient width, suitable grades, and adequate construction to provide for the needs of vehicular traffic in relation to the proposed use of the land, including adequate access for fire, police and emergency vehicles at all times, and if the layout and construction will permit the proper

installation of municipal services to serve the land to be divided.

2. **Within a Subdivision.** Streets within a subdivision shall be considered to provide adequate access if complying with the standards established in these Rules and Regulations.
3. **To a Subdivision.** Existing ways providing access to streets within a subdivision shall be considered to provide adequate access if such existing way meets the standards set forth herein for width of right of way, pavement width, sight distance, and maximum grade.

3.10.3. Obligations.

If the Planning Board determines that the physical condition, design or other features, including the width, of a public way from which a subdivision has access are considered unsafe or inadequate, the Board may require specific improvements to the public way(s) to address these conditions, as conditions of its approval of a Definitive Plan. All improvements to public ways required by the Planning Board shall also be subject to the approval of the Board of Selectmen.

The Board may require any improvements to a public way proposed to be used for access to the subdivision necessary for it to meet the applicable standards of the Subdivision Rules and Regulations for a minor, secondary or major street. The Board may make these improvements a condition of its approval of a subdivision. Where the width of the access road is inadequate to carry the expected traffic, the Board may require the applicant to dedicate a strip of land for the purpose of widening the abutting public way. The Board may consult with the Department of Public Works, Traffic Rules and Regulations Committee, and outside consultants to determine the need for such improvements. Any such work necessary to satisfy specific mitigation requirements within such public way, including any dedication of land for the purpose of widening shall be made only with the permission of property owners and the Board of Selectmen or other governmental agency having jurisdiction over such way. All costs of such efforts shall be borne by the applicant.

The Board may also require mitigation measures at the subdivision entrances and/or at other intersections to address anticipated adverse impacts to sight distance, intersection and roadway capacity and safety.

In the event such physical improvements are impracticable, the Board may require a pro-rata monetary contribution to a capital project undertaken by the Town for access improvements that would benefit the proposed subdivision.

3.10.4 Waiver of Access Rules.

The Board may waive strict compliance with these access regulations only upon its determination, following consultation with the Department of Public Works, Police Chief, and Fire Chief, that the way in fact will be otherwise sufficient to serve the needs for access to serve potential uses of land abutting on or served by the way in question.

3.11 AUTHORIZATION TO SUBMIT A PLAN.

Where any plan is submitted by an individual or agency other than the owner of the affected land, the applicant must provide a letter from the owner authorizing the applicant to submit the plan with an original signature. Evidence of the owner's rightful ownership of the land, such as a deed, must also be submitted with all applications. All applications shall include a Municipal Lien Certificate, indicating no outstanding taxes or assessments are due on the property.

SECTION 4.0 PLAN BELIEVED NOT TO REQUIRE APPROVAL

4.1 SUBMISSION

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 said plan does not require approval under the Subdivision Control Law may submit such plan to the Planning Board seeking an endorsement to the effect that such approval is not required.

4.1.1 Application.

Said person shall file with the Planning Board an approved application form, with an original and ten (10) prints of the plan, together with a fee, in accordance with the most recent schedule of fees adopted by the Planning Board. Such application shall be accompanied by evidence intended to show that said plan does not require approval under the Subdivision Control Law pursuant to G.L. c. 41, s. 81P.

4.1.2 Notice.

Said person, in accordance with General Laws, Chapter 41, Section 81T, shall give written notice, by delivery or registered mail, to the Town Clerk stating the date of the submission of the plan to the Planning Board. If such notice is given by delivery, the Town Clerk shall, if required, give written receipt thereof to the person who delivered such notice.

4.1.3 Referral.

The Planning Board will refer any plans so submitted to the Police Department, Fire Department, Department of Public Works and Conservation Commission for review.

4.1.4 Electronic File.

The applicant shall submit a CD or diskette containing the Form A plan, produced by an Autocad or similar computerized drafting system, in either Autocad Drawing Format (.dwg), Data Exchange Format (.dxf) or ESRI Interchange Format (.e00), registered to Massachusetts State Plane (Mainland) Coordinates, North American Datum of 1927 or 1983, as part of the application for endorsement of the plan. Orthophotos available from Mass GIS may be used in registering data. If the applicant is unable to provide the above, a fee determined by the Board will be charged to cover the cost of digitizing the plan.

4.2 CONTENTS

4.2.1 Size of Plan.

All plans submitted under this Section shall be of minimum dimensions of eight and one-half inches (8.5") by eleven inches (11") and of maximum dimensions of twenty-four inches (24") by thirty-six inches (36") or such other size as may be specified by Land Court.

4.2.2 Required Information.

Plans shall bear the following information:

1. Title Block containing the following information:
 - a. Name of owner of record;
 - b. Title, date and scale of plan and a bar scale;
 - c. Name and address of Registered Land Surveyor;
 - d. The statement "Approval Not Required Under the Subdivision Control Law" and sufficient space thereunder for the date and the signatures of all members of the Board;
 - e. Date of Survey and/or source of information.
2. A block, 3 1/2" x 3 1/2" located adjacent to the title block, reserved for use by the Registry of Deeds.
3. The following statement, together with a location suitable for the preparer's signature: "This plan has been prepared in conformance with the rules and regulations of the Registers of Deeds."
4. North point.
5. Existing and proposed boundary lines, including dimensions and areas of all lots shown.
6. Existing and proposed streets, ways and easements. Where a new easement is proposed for a driveway or other vehicular access, the boundaries of this easement shall be flagged at each change in direction or at points sufficient to identify its location until the proposed driveway or roadway is completed and construction has been inspected by the town.
7. Location of all existing buildings, structures and bounds. In instances where a new lot line is being created, bounds shall be set along each new lot line at each change in direction.
8. Illustration, by broken line, of all setback lines established by the Zoning Bylaw. In instances where a new lot line is being created, the Planning Board may require field verification of building setbacks from existing or new property lines.
9. Location(s) of any easements or rights of way traversing or adjacent to the locus. Where a new easement is proposed for a driveway or other means of access, the boundaries shall be flagged at each change in direction until the proposed driveway or roadway is completed and construction has been

inspected by the town.

10. Boundaries, if any, of any area(s) which the Conservation Commission has determined to be subject to G.L. c. 131, s. 40 and the Town of Scituate Wetlands Protection Bylaw, General Bylaws Section 30700. These areas shall be determined through approval of an Abbreviated Notice of Intent with the Conservation Commission. This approval shall be obtained prior to applying for endorsement of a plan as Approval Not Required.
11. Lot and/or house numbers.
12. Names of all abutters as they appear on the most recent tax list.
13. Zoning classification(s) and location(s) of any zoning district boundaries, including the boundaries, if any, of overlay Zoning Districts that may lie within the locus of the plan.
14. Calculation of the upland and wetland area for each proposed lot expressed in sq. ft.
15. Notice of any decisions of the Zoning Board of Appeals including but not limited to variances and exceptions regarding the land or any building thereon.
16. The locations of existing septic systems and, if known, proposed septic systems and their easements.
17. A locus map at 800 feet to the inch.
18. Any other information necessary for the Board's determination.

4.3 ENDORSEMENT

4.3.1 General.

If the Board determines that the plan does not require approval, it shall forthwith, without a public hearing, endorse on the plan under the words "Approval not required under the Subdivision Control Law", or words of similar import.

4.3.2 Statement of Reasons.

The Planning Board may add to such endorsement a statement as to the reason approval is not required or such other statement as may be deemed appropriate by the Planning Board. The Planning Board may include, at its discretion, the following statement: "Planning Board endorsement of this plan is not a determination as to conformance with zoning regulations." The Planning Board may also require the notation "Lot (No.) is Not a Building Lot Without Further Zoning Relief" in appropriate circumstances.

4.3.3 Effect.

Such endorsement shall not be deemed to constitute any determination of compliance with the requirements of the Zoning Bylaw. Following endorsement said plan shall be returned to the applicant and the Planning Board shall notify the Town Clerk in writing of its action.

4.3.4 Denial.

If the Board determines that the plan does require approval under the Subdivision Control Law, it shall, within twenty-one (21) days of the submission of the plan, give written notice of its determination to the Town Clerk and the applicant, and return the plan without endorsement. The applicant may submit the plan for approval as provided by law and by these Rules and Regulations, or may appeal from the determination of the Board in the manner provided in G.L. c. 41, s. 81BB.

4.3.5 Constructive Approval.

If the Planning Board fails to act upon a plan submitted under this Section or fails to notify the Town Clerk and the person submitting the plan of its action 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, and the Board shall forthwith make such endorsement on said plan, or, on the failure of the Board to do so forthwith, the Town Clerk shall issue a certificate to the same effect.

SECTION 5.0 PRELIMINARY PLANS

5.1 PREAPPLICATION CONFERENCE

Prior to investing in extensive professional design costs for preparation of subdivision plans, the applicant is invited to review the proposed development of the parcel of land with the Board, in order to explore general conditions involving the site and to discuss potential problems. Pencil sketches, which need not be professionally prepared, will assist in this discussion, and should show the critical features of a Preliminary Plan. In some cases, this pre-submission review may eliminate the need for the formal submission of a Preliminary Plan.

5.2 SUBMISSION

5.2.1 General.

An applicant may submit, for approval, a Preliminary Plan of a subdivision. An applicant for a non-residential subdivision shall submit a Preliminary Plan. The submission of such a Preliminary Plan will enable the subdivider, the Board, the Board of Health, other municipal agencies and owners of property abutting the subdivision to discuss and clarify the problems of such subdivision before a Definitive Plan is prepared. Therefore, it is strongly recommended in every instance that a Preliminary Plan be filed.

5.2.2 Application.

An application for approval of said Preliminary Plan shall be filed with the Planning Board on the approved Application Form (18 copies) which shall be submitted together with an original and eighteen (18) prints of the plan and profile (copies of which will be distributed by the Planning Board to other Town boards, commissions and appropriate agencies), sixteen (16) copies of any supporting reports, narratives, or memoranda, and a fee as specified on the most recent Fee Schedule adopted by the Planning Board. The applicant shall give written notice, in accordance with G.L. c. 41, s. 81S, to the Town Clerk by delivery or by Registered or Certified Mail, stating the date of such submission to the Planning Board.

5.3 CONTENTS

5.3.1 Preparation.

The Preliminary Plan shall be prepared at a scale of forty feet (40) to the inch, unless approval of submission at an alternate scale shall have been approved by the Planning Board.

5.3.2 Required Information.

The Preliminary Plan shall show the following information. Should the plan be submitted on more than one sheet, each sheet shall be of the same size, each containing the required title block indicating the sheet number of each sheet.

1. Title block, containing the following information:
 - a. Title (subdivision name), date of survey and scale.
 - b. Name of owner of record and of applicant if other than owners of record.
 - c. Name and address of Registered Land Surveyor or Registered Professional Engineer.
2. North Point.
3. Existing and proposed lines of streets, ways, easements, and any public or common areas within the subdivision (The proposed names of proposed streets shall be shown in pencil until they have been approved by the Board).
4. Where the applicant also owns or controls unsubdivided land adjacent to that shown on the Preliminary Plan, a possible or prospective street layout for such adjacent land shall be included.
5. Location, names, present widths and status as accepted or unaccepted, of adjacent streets or of streets approaching or within reasonable proximity of the proposed subdivision.
6. Names of all abutters as they appear on the most recent local tax list.
7. A locus plan at a scale of one inch (1") equals eight hundred feet (800') showing the relationship of the subdivision to adjoining property within a radius of a quarter of a mile of the proposed subdivision. Any road designated as a Scenic Road, any land used for Conservation Land or parks, and any land occupied by municipal facilities within this radius, shall be so noted on the locus plan.
8. The zoning classification of the land shown on the plan and the location of any zoning district boundaries, including overlay Zoning Districts, that may lie within the locus of the plan.
9. The location of all major features of the land such as existing walls, fences, monuments, buildings, large trees or wooded areas, large boulders, rock edges or ledge outcroppings, swamps, water bodies, and natural water courses including drainage ditches.

10. The location of the General Soils Classifications identified by the Natural Resource Conservation Service, United States Department of Agriculture as depicted on maps available at the Planning Board Office.
11. Existing (solid line) and proposed (broken line) topography of the land at two foot (2') contour intervals for slopes flatter than four horizontal to one vertical (4:1), and five foot (5') intervals for slopes equal to or steeper than 4:1. Where the slope of the land is flatter than one percent, spot grades shall be shown to illustrate the topography of the land. Elevations shown shall be developed on Town of Scituate, base datum. Such datum shall be stated on the plan.
12. Approximate boundary lines of proposed lots, with approximate areas and dimensions.
13. Calculation of the approximate upland and wetland area for each proposed lot expressed in sq. ft.
14. Proposed systems of storm drainage, water and sewage disposal including adjacent existing natural waterways intended to receive sewage and/or drainage effluent. The locations of existing and proposed septic systems and their easements.
15. Profiles of existing grades and approximate finished grades of proposed roadways, and drain and sewer systems at a scale of 1" = 40' horizontally and 1' = 40' vertically.
16. Limits (perimeter) of all contiguous land under the ownership or control of the applicant.
17. Location(s) of any easements or rights of way traversing or adjacent to the locus.
18. Illustration, by broken line, of all setback lines established by the Zoning By-law.
19. Boundaries, if any, of any area(s) which the Conservation Commission has determined to be subject to G.L. c. 131, s. 40 and the Town of Scituate Wetlands Protection Bylaw, General Bylaws Section 30700. These areas shall be determined through approval of an Abbreviated Notice of Intent with the Conservation Commission prior to filing the application for a Preliminary Plan.
20. An aerial photograph at 1:1,000 or scale showing greater detail, from 1995 or later, indicating the property to be subdivided, the proposed street layout, lot lines, and easements. Information on where aerial photographs may be obtained is available from the Planning Department.

5.3.3 Required Supporting Documentation.

The following supporting documentation shall be submitted with the application for a Preliminary Plan:

1. Copy of the appropriate quadrangle map(s) from the most recent published edition of the Massachusetts Natural Heritage Atlas, showing the location of the project site relative to Priority Habitats of Rare Species.
2. Copy of the appropriate quadrangle map(s) from the most recent published edition of the Massachusetts Natural Heritage Atlas, showing the location of the project site relative to Estimated Habitats of Rare Wildlife and Certified Vernal Pools.
3. A narrative description of all the utility services proposed for the project, and whether connection to municipal systems will be required for water service, sanitary sewage disposal, and storm drainage.
4. If the application requires waivers of the Subdivision Rules and Regulations, a statement shall be submitted including a description of the waiver, identification of the applicable Section of the Subdivision Rules and Regulations, and the reason the waiver should be considered in the public interest.

5.4 PROCEDURES

5.4.1 Review of Plan.

The Preliminary Plan will be transmitted to the Board of Health, Building Commissioner, Director of Public Works, Traffic Rules and Regulations Committee, Fire Chief, Police Chief, Conservation Commission, and such other boards, committees or agencies as the Planning Board may deem advisable.

5.4.2 Observation Pits.

During discussion of the Preliminary Plan, the location of observation pits shall be determined. The Board shall consult with the Department of Public Works in determining the best locations of these observation pits.

1. Observation pits shall be made in the presence of the Planning Board and/or its agent.
2. Prior to excavating the pits, the centerline of the roadway, perimeter of proposed stormwater storage and treatment facilities (e.g., detention, retention, or infiltration basins or structures), and locations of any other items deemed relevant by the Planning Board, shall be staked out on the subdivision site.

3. A detailed description of the soil profile shall be prepared for each observation pit, in accordance with the regulations concerning "deep observation holes" as provided in Title 5 of the State Environmental Code (310 CMR 15.00), prior to submission of the Definitive Plan.
4. The minimum depths of such pits shall be as follows:
 - a. Roadway Cut Sections: Five (5) feet below proposed finished grade or to bedrock whichever is less.
 - b. Roadway Fill Sections: Eight (8) feet below existing grade or to bedrock, whichever is less, except in unstable soils (i.e., peat , muck, etc.) where the minimum depth shall be five (5) feet below hard bottom.
 - c. Stormwater Detention, Retention, or Infiltration Basins and other Infiltration/Recharge Structures: Four (4) feet below the bottom of basin or structure, or to bedrock, whichever is less.
 - d. Other features for which observation pits are warranted: Depth as approved by the Planning Board.

5.4.3 Preliminary Approval.

Following review by the appropriate municipal agencies and the Public Discussion described above, the Planning Board may give such Preliminary Plan its approval with or without modifications. Such approval shall incorporate the recommendations of the Board of Health, if any.

5.4.4 Effect.

Such approval does not constitute final approval of a subdivision.

SECTION 6.0 DEFINITIVE PLAN

6.1 PREAPPLICATION CONFERENCE

Prior to investing in extensive professional design costs for preparation of subdivision plans, the applicant is invited to review the proposed development of the parcel of land with the Board, in order to explore general conditions involving the site and to discuss potential problems. Pencil sketches, which need not be professionally prepared, will assist in this discussion, and should show the critical features of a Preliminary Plan.

6.2 SUBMISSION

6.2.1 Application.

Any person who submits a Definitive Plan of a Subdivision to the Planning Board for approval shall file with the Board a properly executed application form together with the original drawings and eighteen (18) print sets thereof, dark line on white background, of each plan and profile. The applicant shall also file sixteen (16) copies of any supporting reports, narratives, or memoranda, and seven (7) copies of stormwater management calculations.

6.2.2 Notice.

The applicant, in accordance with G.L. c. 41, s. 81T, shall file by delivery or registered or certified mail a notice with the Town Clerk stating the date of submission for such approval and accompanied by a copy of the executed application form.

6.2.3 Fee.

Every application for approval shall be accompanied by a fee, determined in accordance with the most recent Fee Schedule adopted by the Planning Board. Costs of advertising and notices shall be charged to the applicant, unless otherwise ordered by the Board.

6.2.4 Additional Costs.

Should the Planning Board incur additional costs in the review of the Definitive Plan, such costs shall be borne by the applicant unless otherwise ordered by the Board.

6.2.5 Consultation with Other Boards and Agencies.

Prior to submission of the Definitive Plan, the applicant is encouraged to review with the applicable Town departments, the proposed design, location and installation of water, sanitary sewage and storm drainage systems. In order to avoid the need for Modification of the Definitive Plan, the applicant is encouraged to obtain approval from the Conservation Commission for infrastructure improvements prior to the close of the Planning Board's Public Hearing.

6.2.6 Other Permits.

Approval of a Definitive Plan shall not be construed to eliminate the requirement that the applicant obtain all other permits required by law including, but not limited to, permits issued by the DPW, Conservation Commission, Board of Health, Board of Selectmen, Massachusetts Department of Environmental Protection and Executive Office of Environmental Affairs.

6.2.7 Incomplete Submissions.

The Board reserves the right to disapprove incomplete submissions at any time if, in its opinion, review of the plan is hampered by the absence of required information. In the event that incomplete plans are submitted to the Board, after opening a public hearing, the Board may vote to disapprove the plan and return plans to the applicant as incomplete. The Board shall cite those specific regulations with which the plan is not in compliance in a letter noting the reason for the Board's action, which shall be filed with the Town Clerk. In the event of such disapproval, the Board reserves the right to retain any filing or review fees.

6.3 CONTENTS

6.3.1 Preparation.

The Definitive Plan shall be prepared by a Registered Professional Engineer or a Registered Land Surveyor, except that the Landscape Plan shall be prepared by a Registered Landscape Architect. All lines and writing shall be clear and legible. The plan shall be at a scale of one inch (1") equals forty feet (40') or such other scale as the Board may accept to show details clearly and adequately. Sheet sizes shall be twenty-four inches (24") by thirty-six inches (36"). A margin of two and one-half inches (2.5") clear shall be allowed on the left hand side for binding and one inch (1") margin on the remaining three sides. Multiple sheets shall be accompanied by an index sheet at a scale of 1"=100', showing the entire subdivision and all sheets shall be appropriately numbered and referenced thereto.

6.3.2 Required Sheets.

The Definitive Plan shall consist of at least eight (8) separate sheets as follows:

1. A cover sheet, including an index, locus and legend;
2. An index sheet showing entire subdivision at scale of 1"=100';
3. A subdivision plan;
4. A layout plan and profile;

5. A topographic plan;
6. A landscape plan;
7. An erosion and sedimentation control plan;
8. An easement plan;
9. Detail drawings on a separate sheet(s.)

6.3.3 Required Information.

The Definitive Plan shall contain the following information:

1. Each cover sheet, subdivision plan, topographic plan, and layout plan and profile shall contain a title block containing the following information:
 - a. Title (Subdivision Name), date of survey and scale, and a bar scale, as required by the Registry of Deeds.
 - b. Name of owner of record and of applicant if other than owner of record.
 - c. Name and address of the Registered Land Surveyor or Registered Professional Engineer.
 - d. Adjacent to the title block, shall be a block, measuring three and one-half inches (3.5") by three and one-half inches (3.5"), which shall be reserved for use by the Registry of Deeds.
 - e. Each plan and cover sheet shall also have the following statement, together with a location suitable for the preparer's signature, placed upon it: "This plan has been prepared in conformance with the rules and regulations of the Registry of Deeds."
2. **Cover Sheet.** The cover sheet shall consist of a Locus Plan, at a scale of 1" = 800', and shall illustrate all streets, lot lines and easements, and shall show the relationship of the subdivision to adjoining property within a radius of a quarter of a mile of the proposed subdivision. A street map or U.S.G.S. quadrangle (or portion thereof) may be used as the basis for the Locus Plan.
 - a. Any road designated as a Scenic Road, any land used for Conservation Land or parks, and any land occupied by municipal facilities within this radius, shall be so noted on the locus plan.
 - b. If the property that comprises the subdivision or any part thereof has been examined, approved, and confirmed by the Massachusetts Land Court, such information shall

be noted on the cover sheet with case numbers and other pertinent references, and the same requirement shall apply to any adjoining parcels of the applicant.

- 3. Subdivision Plan.** The Subdivision Plan shall contain all of the following:
- a. North Point.
 - b. Existing and proposed lines of streets, ways, easements and any public or common areas within the subdivision. (The proposed names of proposed streets shall be shown in pencil until they have been approved by the Board).
 - c. Location, names and present widths of adjacent streets or of streets approaching or within reasonable proximity of the proposed subdivision.
 - d. A locus plan at a scale of one inch (1") equals eight hundred feet (800') showing the relationship between the subdivision and adjoining property within a radius of a quarter mile of the proposed subdivision.
 - e. Names of all abutters as they appear on the most recent local tax list.
 - f. Boundary lines, dimensions and areas of all proposed lots, including all bearings and distances of the property lines, with all lots designated numerically and in sequence. Bounds shall be set along each new lot line at each change in direction or at points sufficient to identify the location of lot boundaries.
 - g. Calculation of the upland and wetland area for each proposed lot expressed in sq. ft.
 - h. A closed traverse of the perimeter of the subdivision, tied into public and private monuments, shall be shown on the plan. The error of the closure on the perimeter shall be 1:12,000 or better. Closure calculations shall be submitted on a separate sheet.
 - i. Sufficient information to accurately locate existing and proposed streets (including the location, name, and width thereof), ways and easements, as well as their connections to existing streets, ways and easements in the vicinity.
 - j. The limit of previous approval by the Planning Board and the date of such approval. If the subdivision adjoins an accepted public way, it shall be so designated (If a public way, the date of acceptance must be shown).
 - k. Zoning classification of the land shown on the Plan and

the location of any zoning district boundaries, and including the boundaries, if any, of overlay Zoning Districts that may lie within the locus of the Plan.

- l. Illustration, by broken line, of all setback lines established by the Zoning By-laws. The Planning Board may require field verification of building setbacks from existing or new property lines.
- m. Location(s) of any easements or rights of way traversing or adjacent to the locus. The Planning Board may require field verification of boundaries of existing or new easements.
- n. All proposed easement(s) for access, utilities, or any other purpose, such as conservation restrictions for proposed open space, shall be shown on the subdivision plan.
- o. Boundaries, if any, of any area(s) which the Conservation Commission has determined to be subject to G.L. c. 131, s. 40 and the Town of Scituate Wetlands Protection Bylaw, General Bylaws Section 30700. Wetland lines shall be determined through a filing of an "Abbreviated Notice of Intent for Wetland Resource Delineation" with the Conservation Commission prior to filing an application for a Definitive Plan.
- p. Sufficient permanent physical control points on the perimeter shall be set in the field and identified on the Plan to facilitate the reproduction of the subdivision survey.
- q. Note on Plan. The Board reserves the right to require that a note be placed on the plan and on subsequent transfers of titles stating that lots are subject to a Homeowner's Agreement which assigns to the owners the costs of inspection and maintenance of specified components of the stormwater management and drainage system, and any other specified common amenities, and that these facilities will be operated and maintained by a Homeowner's Association.

4. Layout Plan and Profile. The Layout Plan and Profile shall be drawn at a scale of 1" = 40' horizontally and 1" = 4' vertically, and shall contain the following:

- a. Lengths, widths, sidelines, centerlines, points of tangency, lengths of tangents, lengths of curves, radii, and intersection angles of all curves for all streets, ways and/or easements.
- b. The proposed horizontal layout of the storm drainage, septic systems and their easements, sanitary sewage

facilities, water supply and underground utility systems, showing their sizes and materials, together with their appurtenances extended to the sideline of each street. All necessary utility easements shall also be shown.

- c. Location of hydrants, street lighting where required by the Board of Selectmen, walks, trees, curbing and similar detail for all proposed streets and for all existing streets for two hundred feet (200') to each side of each intersection with a proposed street.
- d. Immediately above or below the layout of each street, a profile showing the following:
 - 1.) Existing centerline and sideline grades and proposed centerline grades.
 - 2.) Existing and proposed ground elevations, based on 1929 NGVD base datum, at the roadway centerline at the top and bottom of all vertical tangent sections and at twenty five foot (25') intervals along all vertical curves.
 - 3.) The lengths and site distances of all vertical curves.
 - 4.) The size, location and grade of storm drain, sanitary sewage and water supply systems, whether within a roadway or an easement. If a piped utility is not located within the road right-of-way, it shall be shown in a separate profile taken along the centerline of the proposed utility (if more than one utility shares an easement, then the profile shall be along the centerline of the easement).
 - 5.) Invert elevations at all manholes, pipe ends, catch basins, and changes in pipe slope.
 - 6.) Street gradients shown by figures expressed in percent.

5. Topographic and Grading Plan. The Topographic and Grading Plan shall encompass the entire area to be subdivided; together with the area beyond the limits of the subdivision which may be affected by changes in surface runoff resulting from the proposed subdivision, and shall include the following:

- a. Locations of all permanent monuments, identified as to whether existing or proposed.
- b. Natural features and unique cultural features, such as

waterways, drainage courses, unique specimen trees, large boulders or ledge outcroppings, stone walls, old wells, and historic structures.

- c. Locations of existing streets, lot lines and easements, buildings, walks, drives, septic systems and their easements, surface and subsurface drains and other existing features within fifty (50) feet of the sidelines of any street or way.
- d. Existing and proposed contours, developed on 1929 NGVD base datum, shall be shown at two foot (2') intervals, except that one foot contours and spot elevations shall be shown on slopes of 2% or less. Spot grades shall be provided at high points and low points. Spot grades shall also be provided where the slope of the land is less than one percent, as necessary to illustrate the topography of the land.
- e. In order to assess the effect of clearing and changes in elevation on existing drainage patterns, the topographic plan shall include proposed maximum areas of clearing associated with construction of roads, utilities, drainage systems and new homes.
- f. Where areas of fill are known, the location and area of contiguous land proposed to be filled including any proposed mounded septic systems.
- g. Any proposed retaining walls, including the location, height and length of the wall with detail showing the proposed treatment of the exposed surface.
- h. Existing large trees, having a caliper of twelve inches (12") or more, not within an area delineated as "not to be disturbed" (as provided in the following subparagraph) shall be located and identified on the topographic plan.
- i. Natural areas not to be disturbed by the proposed subdivision may be so indicated on the topographic plan.
- j. Where a Preliminary Plan has not been filed and approved, observation pits, as specified by Section 5.4.3, shall be provided. The location of said observation pits shall be subject to the approval of the Planning Board.
- k. Boundaries, if any, of any area(s) which the Conservation Commission has determined to be subject to G.L. c. 131, s. 40. Wetland lines shall be determined through a filing of an "Abbreviated Notice of Intent for Wetland Resource Delineation" with the Conservation Commission.

6. Landscape Plan.

A Landscape Plan prepared and stamped by a Registered Landscape Architect shall be submitted with all applications for a Definitive Plan. The landscape architect should be included in the design process to assure integration of landscaping with other features of the subdivision and to promote the preservation and enhancement of the natural landscape. The Landscape Plan shall show the following:

- a. All proposed landscaping including plantings at the entrance, planted cul-de-sac islands, screening for stormwater management facilities such as detention/retention basins, and other landscaped areas.
- b. All land proposed to remain in an undisturbed, natural state, either through designation as a no-cut zone, subject to a deed restriction or conservation easement, or otherwise intended to be dedicated as open space, with boundaries clearly defined and type of protection indicated by a note on the plan.
- c. Existing and proposed stone walls, existing and proposed fencing, existing and proposed retaining walls, unique specimen trees, existing trees with diameters greater than 12" (dbh), wooded areas, and other significant vegetation.
- d. The number, size, species and cultivated variety of proposed plantings shall be shown on the Landscape Plan. Plant names shall include both botanical and common names.
- e. Details of the proposed method for planting trees and shrubs shall be shown.
- f. Construction details of proposed retaining wall(s), including location, length, height, and detail of stone facing or other surface treatment.
- g. Specified times for plantings and seeding.

7. Erosion and Sedimentation Control Narrative and Plan.

In order to ensure that applicant and its contractor shall prevent off-site erosion and sedimentation during construction and during the period of establishment of permanent vegetation on all unpaved disturbed areas of the site, the applicant shall submit a narrative describing proposed erosion and sediment control measures to be used during construction of the project and an accompanying plan showing the locations where these measures will be implemented.

- a. **Guidelines for Narrative and Plan.** The Erosion and Sedimentation Control Narrative and Plan shall meet all requirements of the Conservation Commission under 310 C.M.R. 10.00 and the Town of Scituate Wetlands Bylaw, and shall be consistent with: the design guidelines for erosion and sedimentation of Section 7.4 of these Subdivision Rules and Regulations, the federal NPDES Stormwater Permit program for the Town of Scituate, and the *Massachusetts Erosion and Sedimentation Control Guidelines for Urban and Suburban Areas* prepared for the Massachusetts Department of Environmental Protection, March, 1997.

At no time during construction shall stormwater flows off site exceed those that existed prior to development, based on a 10-year frequency, 24 hour design storm.

- b. **Contents of Narrative and Plan.** The Erosion and Sedimentation Control Narrative and Plan shall include the following components:
- 1.) A narrative, consistent with the erosion and sediment control drawings and details that are included in the Definitive Plan drawings. This narrative may be prepared in report form, or may appear on the drawings, and shall contain the following:
 - a.) A brief description of proposed construction activities, and the proposed sequence and schedule of construction. The schedule shall reflect any necessary or proposed phasing of work.
 - b.) A description of erosion and sedimentation measures proposed at different phases of construction, and key milestones for their implementation. The description of these erosion and sedimentation control measures shall identify specific locations for implementation, which shall be shown on the accompanying plan, and may be indicated by number or letter for clear cross-referencing.
 - c.) Proposed erosion and sedimentation measures may include, but shall not be limited to the following:
 - i. Measures to prevent tracking of sediment off the site by construction vehicles;
 - ii. Measures for stabilizing temporary stockpiles of soil materials;
 - iii. Measures for dust control;

- iv. Measures for trapping waterborne sediment, such as silt barriers, sediment traps, sediment basins, catch basin inlet protection;
 - v. Measures for temporary and permanent stabilization at all storm drain or sub-drain discharges;
 - vi. Measures for trapping sediment from construction dewatering operations;
 - vii. Measures for temporary stabilization of disturbed areas that will not be permanently stabilized with vegetation or other permanent surface within 30 days of initial exposure;
 - viii. Measures for temporary stabilization of seeded areas while seedlings become established (including such measures as mulch application and use of erosion control blankets);
 - ix. Measures for responding to erosion and sedimentation contingency events during the course of construction;
 - x. Measures for removal of temporary works, disposal of accumulated sediment and debris, and final stabilization of the affected areas at the completion of construction;
 - xi. Any additional erosion control and/or water pollution control devices or methods.
- d.) Identification of a representative of the applicant or their contractor who will be responsible for on-site monitoring of erosion and sediment controls during construction, with a phone number with twenty-four hour availability, and whom the Town can contact in the event of erosion/sedimentation problems or emergencies.
- 2.) A plan shall be submitted, consistent with the narrative, showing the following:
- a.) Locations of all proposed erosion and sedimentation control measures proposed to meet the objectives of Section 6.3.2 Paragraph

7.b.1.c. of these regulations, above, including sediment basins; mulching, matting or temporary vegetation (specify type used for each); hay bales and siltation control fences; and any other methods to be used.

- b.) Proposed limits of earth disturbance including clearing for all roads, utilities, amenities, and appurtenant structures proposed for the subdivision, and the expected length of exposure time. Where the locations of new homes are known, the limits of disturbance for home construction shall be shown.
- c.) Location of temporary staging areas.
- d.) Location of temporary storage for stumps or spoil materials. Such storage shall be in accordance with state and local regulations.
- e.) Documentation of proper construction and erosion control sequencing, through removal of soil and sediment from the site.

8. **Easement Plan.** A plan shall be submitted showing the locations and dimensions of all easements, streets and lots, consistent with the Definitive Plan. The Easement Plan shall be drawn at a scale of 1" = 40' and shall contain the following:

- a. Lengths, widths, sidelines of all streets, ways and/or easements.
- b. The proposed storm drainage, water supply, underground utility systems, septic systems, and all other utility systems and their easements, including their appurtenances extended to the sideline of each street and associated easements.
- c. Easements for all proposed streets and Common Driveways.
- d. The size, location and grade of storm drain, sanitary sewage and water supply systems, whether within a roadway or an easement.

9. **Details Drawing(s).** Details drawings shall include construction details for all utilities and appurtenant structures, erosion and sedimentation control measures, retaining walls, and other structures depicted on the plan drawings.

- a. Road construction details should include the Typical Roadway Cross Section as shown in **Appendix B, Charts,**

Diagrams and Tables, noting any proposed deviations therefrom.

- b. Typical cross sections of all catch basins, manholes, and other utility installations shall conform to the details/typical drawings on file with the Department of Public Works (water, sanitary sewer, storm drains), and to the standards of applicable utility owners (gas, electric, telephone, cable).

6.3.4 Required Supporting Documentation.

The following reports or documents shall be submitted with each application for a Definitive Plan:

1. **Observation Pits.** Information obtained from observation pits as described below shall be submitted with the application for a Definitive Plan. The Board shall consult with the Department of Public Works in determining the best locations of these observation pits.
 - a. Observation pits shall be made in the presence of the Planning Board or its agent.
 - b. Prior to excavating the pits, the centerline of the roadway, perimeter of proposed stormwater storage and treatment facilities (e.g., detention, retention, or infiltration basins or structures), and locations of any other items deemed relevant by the Planning Board, shall be staked out on the subdivision site.
 - c. A detailed description of the soil profile shall be prepared for each observation pit, in accordance with the regulations concerning "deep observation holes" as provided in Title 5 of the State Environmental Code (310 CMR 15.00), prior to submission of the Definitive Plan.
 - d. The minimum depths of such pits shall be as follows:
 - 1.) **Roadway Cut Sections:** Five (5) feet below proposed finished grade or to bedrock whichever is less.
 - 2.) **Roadway Fill Sections:** Eight (8) feet below existing grade or to bedrock, whichever is less, except in unstable soils (i.e., peat, muck, etc.) where the minimum depth shall be five (5) feet below hard bottom.
 - 3.) **Stormwater Detention, Retention, or Infiltration Basins and other Infiltration/Recharge Structures:** Four (4) feet below the bottom of basin or structure, or to bedrock, whichever is less.
 - 4.) Other features for which observation pits are

warranted: Depth as approved by the Planning Board.

2. **Stormwater Management System.** A report describing the design of the stormwater management system, and containing calculations supporting the design of the system shall be provided with each application for a Definitive Plan. To evaluate the proposed drainage system, runoff volume and off-site flooding onto abutting properties, calculations of pre- and post-development stormwater flows from a two, ten and one hundred year, twenty-four hour design storm shall be provided for the entire subdivision, including catchment areas for detention devices. Calculations shall be performed according to the methodology described in Section 7.3.1 4.d.1 of these regulations, Design Calculations for Detention Devices and Outlet Structures.

This report shall indicate whether the subdivision is proposed to discharge to any existing municipal storm drainage system. The following information relating to the design of the drainage system shall be provided with the application for a Definitive Plan:

- a. **Soils Data.** Where detention basins, retention basins, ponds, or infiltration devices are proposed, the designer shall furnish site specific soils information with the design calculations to document the proper design of these systems. Soils information shall be obtained from test pits or borings performed at the location of each proposed stormwater device, and extending to at least four feet below the bottom of the proposed device. The soils conditions shall be evaluated by a qualified soil scientist or Registered Professional Engineer and witnessed by the town's agent. At a minimum, the information provided shall include:
- 1.) A detailed description of soils conditions encountered;
 - 2.) Seasonal high groundwater elevation, as characterized by observations of soils color, structure, and other parameters;
 - 3.) Depth to and description of impermeable or restrictive soil layers, if encountered;
 - 4.) Depth to bedrock, if encountered;
 - 5.) For recharge (infiltration) systems, the soils at and below the infiltrative surface shall be classified according to USDA standard textural classifications, in order to determine suitable recharge rates for system design. Recharge rates shall be determined from the table entitled Table of Hydrologic Soil Properties Classified by USDA

Soil Texture in **Appendix B, Charts, Diagrams and Tables**. Percolation, permeability, or hydraulic conductivity tests may be required to further document the applicable recharge rates.

- b. **Watershed Maps.** Calculations shall include topographic maps showing the entire drainage area contributing to the subdivision. The maps shall depict the pre- and post-development catchment areas and corresponding outlets from the subdivision. Seven copies of all drainage calculations, and topographic maps illustrating the entire drainage area and showing all sub-area boundaries utilized in said calculations, shall be submitted with the Definitive Plan.
 - c. **Information Required for Proposed Use of Municipal Drainage System.** Where the subdivision is proposed to drain into an existing municipal system, the Planning Board shall require the applicant to provide documentation of the capacity of the municipal system in the vicinity of the subdivision, and the impact of the proposed subdivision drainage on this system. The applicant is encouraged to discuss the application with the DPW prior to the actual submittal. The applicant is advised that permission of the Department of Public Works is required for tie-in to the municipal system. Proposals must obtain all necessary permits required by the DPW prior to connecting to the system.
3. **Water Service.** The applicant is encouraged to discuss the application with the DPW prior to submittal to determine how water can best be provided. The applicant is advised that permission of the Department of Public Works is required for tie-in to the municipal system. Proposals must obtain all necessary permits required by the DPW prior to connecting to the system.

The applicant shall provide a statement describing how water service will be provided to the site together with documentation of the estimated water demand of the proposed subdivision and the capacity of the municipal system at the point of connection. This estimated water demand shall include domestic water demand, fire protection demand, and all other water demands.

The Department of Public Works requires the applicant to provide additional information sufficient to determine that the supply of water is adequate for the prospective use by the proposed development. This may include water flow tests including water system flow rate and pressure tests conducted in the vicinity of the proposed point(s) of connection. The applicant shall provide the Planning Board with copies of all information submitted to the Department of Public Works in

the course of their review.

The Department of Public Works shall inform the Planning Board of any conditions that should be required in order to secure safe, adequate water service for the proposed subdivision, and shall coordinate its review of the water distribution system with the Planning Board, with consideration for the required time frames for Planning Board approval of a Definitive Plan.

4. **Sewage Disposal.** The applicant shall provide a statement describing the method of disposal of sanitary sewage from the project. If the project will be served by on-site sewage disposal systems, a copy of the Board of Health's approval of the Definitive Plan and any conditions required by the Board of Health, as provided under Section 6.4.1 of these Rules and Regulations, shall be provided to the Planning Board not less than forty-five days after the filing of the application for the Definitive Plan.

Approval by a Board of Health or officer shall not be treated as, nor deemed to be approval of a permit for the construction and use on any lot of an individual sewage system; and approval of a Definitive Plan for a subdivision by a Board of Health or officer shall not be treated as, nor deemed to be, an application for a permit to construct or use an individual sewage system on any lot contained therein.

The applicant is advised that permission of the Board of Selectmen is required for tie-in to the municipal sewer system. Proposals must obtain all necessary permits required by the Board of Selectmen prior to connecting to the system. Applicants who intend to utilize sewer as a method of disposal of sanitary sewage are encouraged to discuss their proposals with the Town Administrator and/or Board of Selectmen prior to submitting a Definitive Plan. The applicant shall provide a plan showing the location and method of the proposed connection to the municipal sewer distribution system. The applicant shall provide documentation from the Board of Selectmen that connection to sewer is feasible not less than forty-five days after the filing of the application for the Definitive Plan.

5. **Traffic Circulation and Safety.** The applicant shall furnish documentation necessary to determine compliance with these regulations, including those concerning street alignment, corner and stopping sight distance, grade, and all others governing location and construction of proposed roads. This documentation shall be in the form of a report prepared by a Registered Professional Engineer with experience in transportation engineering and traffic analysis.

The Planning Board may also require the applicant to provide analysis of the impacts of traffic on the street system serving the subdivision in the form of a report prepared by a Registered Professional Engineer or other qualified professional traffic consultant with experience in transportation engineering and traffic analysis. Generally, traffic impacts shall be addressed as follows:

Level 1: For a subdivision proposal resulting in less than 30 single-family house lots (or equivalent generation of daily vehicle trips), the applicant shall document that the street design standards specified in these rules and regulations are met by the proposed design. Where indicated by local safety or traffic conditions, the Planning Board may require additional information, in the form of a traffic analysis, as follows:

1. The number of average daily and peak hour trips expected to be generated by the subdivision;
2. Average daily and peak hour traffic volumes on roads to be used for access to the subdivision, including traffic expected to be generated by anticipated future land uses;
3. Analysis of intersection / road geometry and its impact on traffic convenience and safety;
4. The capacity and level of service of: existing access roads, intersections that will be impacted by the proposed subdivision, and proposed roads within the subdivision;
5. Recommendations for on- and/or off-site traffic improvements to mitigate traffic impacts at all points of access to the subdivision site, on access roads and at intersections which will be impacted by the subdivision. If the subdivision involves the extension of an existing road, the "point of access" shall be considered the point at which the existing road intersects the nearest through-road serving the project.

This analysis shall be performed by a Registered Professional Engineer or other qualified professional traffic consultant with experience in traffic analysis and/or transportation engineering studies.

Level 2: For a subdivision proposal resulting in 30 or more single-family house lots (or equivalent generation of daily vehicle trips), the applicant shall provide the information required for "Level 1", and shall also furnish a traffic impact study prepared by a Registered Professional Engineer or other qualified professional traffic consultant with experience in transportation engineering and traffic analysis. . The study shall include all items (#1-5) required for the traffic analysis which may be required for Level 1, above. The study shall further address existing and proposed volumes (daily and peak hour), operations, safety, and mitigation measures (if any) at all intersections at which the subdivision is anticipated to add 25 or more peak-hour vehicle trips.

Notwithstanding the above thresholds for traffic impact analysis, the Planning Board may require the applicant to furnish a study of traffic impacts in greater detail, when the Board determines such study to be warranted for the protection of public health, safety, and welfare.

6. **Draft Homeowner's Agreement.** The applicant shall submit a draft Homeowner's Agreement establishing a Homeowner's Association with any application for a Definitive Plan showing detention/retention devices or other stormwater facilities serving the subdivision which are proposed to be located outside the layout of the subdivision's street(s.) This Agreement shall include maintenance of all subdivision roads until such time as they are accepted by the town, and may include maintenance of shared on-site sewage disposal systems if shared maintenance is recommended and approved by the Board of Health.

The Homeowner's Agreement shall allocate the costs of operation and maintenance of specified components of drainage and stormwater management systems to a Homeowner's Association. The Homeowner's Agreement shall include an Operation and Maintenance Plan prepared by a Registered Professional Engineer and shall identify:

- a. The present owner of the drainage system and the land on which it is located.
- b. The components of the drainage system, and the parties proposed to be responsible for their operation and maintenance for the following time periods: during construction, after the road is completed but before it is accepted by Town Meeting, and after the road is accepted by Town Meeting.
- c. The source of funding for operation and maintenance for each major component of the drainage system during

construction, before road acceptance and after road acceptance.

- d. A detailed description of the type and frequency of inspections and maintenance for each component of the drainage system. This shall typically include inspections and/or maintenance required after accumulation of specific depths of sediment, after major storm events and at regularly established time intervals. The method for disposal of sediment shall be described. The Board may require that certain technical inspections be performed by a Registered Professional Engineer.
- e. A requirement that the Homeowner's Association report the results of inspections no less frequently than once per year, and provide a description of maintenance to the Board and Department of Public Works within thirty (30) days after any maintenance has been performed. The Board may require that inspections or maintenance be performed at specific times of the year when they are expected to be most effective.
- f. A requirement that the Homeowner's Association inform the Board and Department of Public Works of the name, address and telephone number of a current responsible party or contact person for the Homeowner's Association. The Homeowner's Association shall inform the town of changes of this responsible party as soon as possible, but no later than seven days after the change has been made.
- g. A requirement that the Homeowner's Association maintain fencing or other appurtenances associated with detention/retention devices or other components of the drainage system they maintain.
- h. A mechanism to enforce maintenance by the Homeowner's Association and maintain funding for maintenance.
- i. The Board may require a performance guarantee to ensure the continued operation and maintenance of drainage and other common facilities.
- j. The Board may require submission of the first year's contracts for maintenance of the detention basin and other common facilities.
- k. A requirement that the Department of Public Works shall have the right of access to the detention basin and other drainage facilities. The Homeowner's Agreement shall be provided to the Board for their approval and reviewed by Town Counsel at the applicant's expense

prior to endorsement of the Definitive Plan. Applicants may use a standard format available in the Planning Board office to help in drafting the Homeowner's Agreement.

7. **Easements.** Draft language for proposed conservation easements shall be provided to the Board prior to approval of the Definitive Plan.
8. **Aerial Photograph.** An aerial photograph at 1:1,200 or scale showing greater detail, from 1995 or later, indicating the property to be subdivided, the proposed street layout, lot lines, and easements. Information on where aerial photographs may be obtained for this purpose is available from the Planning Department.
9. **Location of Endangered Species Habitat.** A copy of the appropriate quadrangle map(s) from the most recent published edition of the Massachusetts Natural Heritage Atlas, showing the location of the project site relative to estimated Habitats of Rare Wildlife and Certified Vernal Pools unless already submitted as part of a Preliminary Plan application.
10. **Waivers.** If the application requires waivers of the Subdivision Rules and Regulations, a statement shall be submitted including a description of the waiver, identification of the applicable Section of the Rules and Regulations, and the reason the waiver should be considered in the public interest.
11. **Base flood elevation in unnumbered A flood zones.** Base flood elevation is required for subdivision proposals or other development greater than 50 lots or 5 acres, whichever is the lesser, within unnumbered A zones as shown on the most recent FEMA Flood Insurance Rate Maps for the Town of Scituate.

6.3.5. Additional Information That May Be Required.

Before approval of a Definitive Plan is granted, the Planning Board may request additional information in order to evaluate the submission with respect to adequacy of stormwater facilities, adequacy of access, traffic circulation and safety, coordination of improvements with existing municipal road, drainage and sewer infrastructure and other public or private utilities, and compliance with objectives of the Master Plan such as protection of natural, historic and cultural resources, proper provision of affordable housing when proposed, and provision of amenities consistent with neighborhood or community character. To assist the Board in this regard, it may request additional input or review, or completion of studies.

6.4 PROCEDURES

6.4.1 Review by the Board of Health.

When a Definitive Plan of a subdivision is submitted to the Planning Board, as provided in G.L. c. 41, s. 810, a copy thereof shall also be filed with the Board of Health. The Board of Health shall report, in writing, to the Planning Board, its approval or disapproval of said plan, and shall send a copy of its report to the person who submitted the plan. In reporting a disapproval, the Board of Health shall make specific findings as to which of the lots (if any) shown on the plan cannot be used for building sites without injury to the public health, and shall specify the reasons therefore.

The Board of Health shall also make recommendations for the correction of the defects specified where such correction is possible, in its report. The failure of the Board of Health to make its report within forty-five (45) days after the plan is submitted to its office shall be deemed to constitute an approval of the plan by that Board. A copy of the Board of Health report shall also be submitted to the applicant.

When the Definitive Plan shows that no public or community sewer is to be installed to serve any lot thereon, approval by the Board of Health or its officer shall neither be deemed as an application for a permit nor deemed as approval of a permit for the construction and/or use of an individual sewage system on any lot within the subdivision.

At the time of the filing of the Definitive Plan, the applicant shall stake all proposed lots and mark proposed lot numbers on said lots for identification to facilitate review by the Board of Health.

6.4.2 Review by Other Town Officials and Outside Consultants.

Following a complete submission of a Definitive Plan, the Planning Board shall distribute copies to those town departments or agencies deemed to have an interest in the proposal, such as the Director of Public Works, Fire Chief, Police Chief, Conservation Commission, and Building Commissioner. The Planning Board will request of each official, board and commission written comments regarding the proposed plan insofar as those aspects which fall under the normal jurisdiction of that official, board or commission, and his/her/their statutory regulations. The Board may elect to schedule an interdepartmental review of the plan of which the applicant will be notified as to time and place.

The Board may request additional information for review from the following sources. Any cost incurred under this Section shall be at the expense of the applicant, with the scope of any studies to be approved and defined by the Board.

1. As to protection of natural resources, including groundwater, surface drinking water supplies, rare and endangered species habitat, and similar resources, the Board may request assessments from a professional hydrogeologist, naturalist and/or similar professionals.

2. As to the removal or alteration of cultural or historic resources, the Board may request an assessment from a qualified consultant with experience in the assessment of such resources.
3. As to traffic circulation and safety, the Board may request a traffic impact study by a Registered Professional Engineer or other qualified professional traffic consultant with experience in transportation engineering and traffic analysis, where due to existing or anticipated traffic conditions, there is a potential concern regarding traffic safety or ease of access for automobiles or emergency vehicles.
4. As to the fiscal impact on the town, including the impacts on schools, the Board may request an assessment from a qualified consultant with experience in the analysis of fiscal impacts of development on cities and towns.
5. As to the suitability of the overall design, including proposed landscaping, in the neighborhood where the subdivision is proposed, the Board may request a review by a Registered Landscape Architect, professional planner, or other qualified professional.
6. As to the form of the Homeowner's Agreement, other Homeowners' Association documents, legal restrictions on the use of land, easements, covenants, and performance guarantees, the Planning Board may request a review by Planning Board Legal Counsel.

6.4.3 Public Hearing.

Upon receipt of a properly executed application form approved by the Planning Board together with the Definitive Plan, the Planning Board will set a date for the required public hearing. Notice of the public hearing shall be given in accordance with the requirements of G.L. c. 41, s. 81T.

Before approval of the Definitive Plan is given, a public hearing shall be held by the Planning Board at the expense of the applicant, notice of the time and place of which and of the subject matter, sufficient for identification, shall be given by the Planning Board by advertisement in a newspaper of general circulation in the Town once in each of two successive weeks, the first publication being not less than fourteen days before the day of the hearing. A copy of said notice shall be mailed by the Board to the applicant and to all owners of land abutting upon the subdivision as appearing in the most recent tax list.

All expenses incurred for plans, surveys, advertisements of hearings, mailing, etc. shall be the responsibility of the applicant submitting said plans for approval, and shall be billed directly to the applicant or shall be taken from a cash deposit. The balance of which shall be forwarded to the applicant at the completion of the review process.

6.4.4 Revisions.

Any revision to the originally filed definitive plan must be submitted 14 days prior to the continuation of the hearing. Each revision shall include all plan sheets originally submitted, with the revision date noted on the plan.

6.5 PLANNING BOARD ACTION

6.5.1 Powers.

After the public hearing, the Board, by a vote of the majority of its members, shall approve, modify and approve, or disapprove the Definitive Plan submitted. Criteria for action by the Board shall be the following:

1. Completeness and technical adequacy of all submissions;
2. Determination that development at this location does not entail unwarranted hazard to safety, health and convenience of future residents of the development or of others;
3. Conformity with the requirements of Sections 6.0 and 7.0 herein, and the Zoning By-Law;
4. Determination that the subdivision as designed will not cause substantial and irreversible damage to the environment, which damage could be avoided or ameliorated through an alternative development plan.

6.5.2 Decision.

The action of the Board with respect to any Definitive Plan shall be by vote, copies of which shall be filed with the Town Clerk and sent by registered mail to the applicant. If the Planning Board modifies or disapproves such plan, it shall state in its vote the reasons for its action and shall rescind such disapproval when the plan has been amended to conform to these Rules and Regulations and to the recommendations of the Board of Health.

Any vote of approval shall incorporate the recommendations of the Board of Health and, unless the Planning Board shall specifically vote otherwise, shall be subject to compliance with all provisions of the Subdivision Rules and Regulations.

6.5.3 Endorsement.

Final approval, if granted, shall be endorsed on the original drawing of the Definitive Plan by the signatures of a majority of the Planning Board but not until the statutory twenty (20) day appeal period has elapsed following the filing of the certificate of approval or disapproval of the Planning Board with the Town Clerk and said Town Clerk has notified the Planning Board that no appeal has been filed.

Endorsement shall be subject to compliance with the construction specifications contained herein and the decision, compliance with the Rules and Regulations and the Zoning By-law, and compliance with the recommendations of the Board of Health.

Prior to endorsement of the Definitive Plan, the applicant shall submit a CD or diskette containing the contents of the layout plan, subdivision plan and topographic plan sheets of the final version of Definitive Plans, produced by an Autocad or similar computerized drafting system, in either Autocad Drawing Format (.dwg), Data Exchange Format (.dxf) or ESRI Interchange Format (.e00), registered to Massachusetts State Plane (Mainland) Coordinates, North American Datum of 1927 or 1983. Orthophotos available from Mass GIS may be used in registering data. If the applicant is unable to provide the above, a fee determined by the Board will be charged to cover the cost of digitizing the plan.

6.5.4 Recording.

Following endorsement, the Board shall, within six (6) months of such approval, file such plan with the Plymouth County Registry of Deeds, and shall transmit prints of the endorsed plan to the appropriate Town Boards and Commissions. The Board will not file such plan, however, until it has received from the applicant two certified checks, one in an amount sufficient to obtain one (1) mylar reproducible and ten (10) prints of each sheet thereof, and one in an amount sufficient to cover the costs of the filing of such plan with the Registry of Deeds.

6.6 MANDATORY CONDITIONS

6.6.1 Failure to Obtain Endorsement.

The applicant shall obtain the endorsement of the Planning Board upon the Definitive Plan within 180 days of the date of approval or termination of the appeal period. Failure to obtain such endorsement shall result in the automatic rescission of the approval of such plan.

6.6.2 Failure to Complete Construction.

The subdivider shall complete the construction of all ways and municipal services within three years of the date of endorsement of the Definitive Plan. Failure to so complete shall result in the automatic rescission of the approval of such plan, unless the Board extends said period, for good cause shown, after the written request of the applicant prior to the expiration of said period.

6.6.3 Construct Streets and All Required Utilities.

As a condition of approval of a subdivision, the applicant shall agree to construct streets and complete all other work specified on the Definitive Plan or required under these Rules and Regulations, meet all relevant provisions of the Scituate Zoning By-Laws and other By-Laws, including installation of all required utilities in such subdivision, and all work incidental thereto, such as grading of lots to provide drainage, construction of retaining walls and other details, as

outlined in Section 7.0 of these Rules and Regulations or as specifically required by the Planning Board. The Planning Board may require that such construction be completed within a specified period of time.

6.6.4 Grant Perpetual Rights and Easements.

An easement shall be provided allowing a Homeowner's Association access to drainage and stormwater management systems which will be privately maintained to allow inspection, maintenance and repair, and allowing the town access in case of an emergency, or to test water quality if this is deemed in the public interest.

As a condition of approval of a subdivision, the applicant shall also grant to the Town of Scituate, a right and easement to construct, repair, replace, extended, operate, use and forever maintain all streets, water mains, sewer mains, and all surface and subsurface storm water drains in, through or under the streets and easements as indicated on the Definitive Plan. The above shall not be construed to relieve the applicant, and his successors in title, to the ownership of a portion of the land or any street within the subdivision, nor diminish in any way, his responsibility to complete all construction as required by the applicant's agreements with the Town and to thereafter maintain all streets and utilities in satisfactory condition until they are accepted by the Town.

6.6.5 Right of Entry and Cooperation by and with Town Officials.

As a condition of approval of a subdivision, and in accordance with G.L. c. 41, s. 81B, the applicant shall consent to allow members and employees of the Planning Board and other persons acting under the authority of the Planning Board as its agents, to enter upon any lands and carry out such surveys and inspections as may be deemed necessary, and place and maintain monuments and marks. As a condition of subdivision approval by the Planning Board, an applicant shall cooperate with the Planning Board and Town officials and assist them in their efforts to verify that the layout, design and construction work in his subdivision are satisfactory and conform to the Town specifications and the requirements of the Planning Board.

6.6.6 Maintenance of Streets and Utilities.

As a condition of approval of a subdivision, the applicant shall maintain all streets and utilities within a subdivision, with the exception of water service. The Town may assess betterments for any work needed to make such streets conform to Town standards prior to acceptance thereof as Town ways.

Street acceptance by the Town shall generally be limited, as to drainage, to the storm drainage system within the street layout. Until a street within a subdivision is accepted by Town Meeting as a public way, all streets, those portions of drainage systems within the street layout, and other improvements within the street layout shall be

operated and maintained by the developer or a Homeowner's Association made up of the residents of the subdivision or their representatives.

After a street is accepted by the town, components of the drainage and stormwater management system outside the street layout such as detention/retention devices and their outfalls, drainage swales, and other similar facilities for stormwater management outside the street layout shall continue to be maintained by the Homeowner's Association. The developer shall inform the Planning Board within seven (7) days of the date that his/her maintenance responsibilities are assumed by the Homeowner's Association.

6.6.7 Streets.

Approval of the Definitive Plan does not constitute the laying out or acceptance by the Town of streets shown on the Plan.

6.6.8 Modification of Approved Plan.

Any modification of an approved Definitive Plan, other than as authorized by G.L. c. 41, s. 81O, shall require modification by the Planning Board of the approved plan in accordance with G.L. c. 41, s. 81W. Failure to comply with this requirement shall result in rescission of the Planning Board's approval.

6.6.9 Required Approvals of Other Governmental Agencies.

Where a Definitive Plan requires approval, permitting or licensing from any local, state or federal agency, this approval, permitting or licensing will be deemed a condition of the Planning Board's approval.

6.6.10 Inscription.

If the Planning Board approves the plan subject to certain conditions, those conditions shall be inscribed upon the approved definitive plan.

6.7 FAILURE TO COMPLY WITH CONDITIONS

Failure on the part of the applicant, his agent, or contractor to comply with any condition or restriction established by the Board in regard to a Form C plan shall be dealt with in the following manner:

1. The Board, through its staff, shall have the authority to enforce the conditions of the Board's approval of the plan.
2. Infractions deemed by the Board or its staff minor in nature, shall result in the applicant being notified of such infraction and directed to take corrective action.
3. Repeated infractions or infractions deemed by the Board or its staff to be major or having a direct impact on health, safety and welfare or upon the integrity of the rules and regulations of the Board, shall result in an immediate Stop Work Order being issued at the project site by the authorized staff, and notification by certified mail of such action to the applicant.
4. A Stop Work Order with certified notice of action shall require the applicant and the agent who issued said Order to appear before the Board at a public meeting for a determination of facts and subsequent action by the Board to secure health, safety and welfare, and compliance with these rules and regulations.

6.8 SECURITY

Pursuant to G.L. c. 41, s. 81U, before endorsement of the Board's approval of a Definitive Plan, the applicant shall secure the construction of ways and installation of municipal services in an amount sufficient to cover the cost of all or any agreed upon portion of such construction and installation and of the subdivision improvements specified in Section 8.0 of these regulations or as may be shown on the Definitive Plan.

6.8.1 Bond or Surety.

Prior to the endorsement of the Definitive Plan, the subdivider may elect to file a performance bond, or deposit money or negotiable securities in an amount determined by the Board as set forth below. Letters of credit are not acceptable. All surety shall be accompanied by a form assigning same to the Town of Scituate, which may be obtained from the Planning Board office. Such bond or security if filed or deposited shall be approved as to form by the Planning Board Legal Counsel, and as to sureties by the Town Treasurer. Such bond or security shall be contingent on the completion of such improvements not

later than three years from the date of the endorsement of the definitive plan. Failure to so complete shall result in the automatic rescission of the approval of the Definitive Plan by the Board, unless the Board extends said period, for good cause shown, after the written request of the applicant prior to the expiration of said period.

1. **Amount.** In determining the amount of the bond or surety, the Board shall be guided by the following formula in setting the sum of the security:

- a. The Board's estimate of the cost to complete the work;
plus
- b. A ten percent margin of error; plus
- c. Sufficient funds to cover potential future costs based on an appropriate rate of inflation over a five year period.

2. **Required Terms.** All performance bonds shall contain the following provision:

If the Principal shall fully and satisfactorily observe and perform in accordance with the qualifications and time schedule set forth herein specified all the covenants, agreements, terms and provisions set forth in the following:

- a. The application for definitive plan approval (Form C);
- b. The subdivision control law and the rules and regulations of the Scituate Planning Board which govern this subdivision;
- c. The Decision of the Planning Board dated and attached hereto as Exhibit A; and
- d. The definitive plan, as approved by the Planning Board in the Decision;

then this obligation shall be void; otherwise, it shall remain in full force and effect and the aforesaid sum shall be paid to the Town of Scituate as liquidated damages.

3. **Additional Information Required.** All performance or surety bonds must be accompanied by:

- a. A letter on company letterhead of the bonding company stating that the individual signing is authorized to sign on behalf of the bonding company and
- b. A letter from any bonding company not headquartered in Massachusetts identifying a local process server.

6.8.2 Statutory Covenant.

Prior to the endorsement of the Definitive Plan, the subdivider may elect to submit a covenant for review by the Planning Board stating that no lot in the subdivision shall be sold and no building shall be erected thereon until the improvements specified in the decision and on the Definitive Plan are constructed and installed so as to adequately serve said lot or lots. Such covenant shall be approved as to form by the Planning Board Legal Counsel. Such covenant shall be executed and duly recorded by the owner(s) of record, and shall run with the land. Such covenant shall state that the improvements shown on the definitive plan shall be completed not later than three years from the date of the endorsement of the Definitive Plan.

Failure to so complete the improvements shall result in the automatic rescission of the approval of the Definitive Plan by the Board, unless the Board extends said period, for good cause shown, after the written request of the applicant prior to the expiration of said period. The covenant shall be referenced on the Definitive Plan prior to recordation in the Registry of Deeds. The subdivider shall promptly, after recording, send a copy of the covenant, showing book and page number, to the Board.

6.8.3 Supplemental Covenant.

The Planning Board may require, prior to the endorsement of the Definitive Plan, a supplemental covenant containing those conditions of approval that are intended to survive the release of the Statutory Covenant. Such covenant shall be approved as to form by the Planning Board Legal Counsel. Such covenant shall be executed and duly recorded by the owner(s) of record, and shall run with the land. The covenant shall be referenced on the Definitive Plan prior to recordation in the Registry of Deeds. The subdivider shall promptly, after recording, send a copy of the covenant, showing book and page number, to the Board.

6.8.4 Converting Covenant to Another Performance Guarantee.

If the applicant desires that lots be released from a covenant and that the improvements remaining to be constructed or installed be secured by another form of performance guarantee, a formal written request shall be sent to the Planning Board by registered mail which sets forth and includes:

1. **Extent.** The extent and scope of remaining work to be completed to satisfy the requirements for the construction or installation of all required ways and municipal services.
2. **Estimate.** An estimate, pursuant to these Rules and Regulations, which reflects all remaining costs related to the construction of all required ways and installation of all required municipal services.

3. **Form and Type.** The form and type of guarantee being given to the Planning Board to secure all remaining improvements.
4. **Planning Board Action.** The Planning Board or its agent will make a determination as to the sufficiency of the submitted estimate, and, if such estimate is accepted, a new performance guarantee will be given to the Planning Board. Upon acceptance by the Planning Board of the new performance guarantee, all applicable lots shall be released from the covenant.

6.8.5 Converting Bond, Deposit, or Agreement to Covenant.

If the applicant desires to secure by means of a covenant the construction of ways and the installation of municipal services in a portion of a subdivision for which no building permits have been granted nor any lots have been sold, and to have the Planning Board release the bond, deposit of money or negotiable security, or agreement and mortgage previously furnished to secure such construction and installation, the applicant shall submit to the Planning Board a reproducible tracing and three (3) contact prints of the reproducible tracing of the Definitive Plan, limited to that part of the plan which is to be subject to such covenant.

Upon approval of the covenant by the Planning Board, reference thereto shall be inscribed on such section of the plan, and it shall be endorsed by the Planning Board and recorded with the covenant at the expense of the applicant. Certified copies of all documents which the applicant records at the Registry of Deeds shall be provided to the Planning Board as set forth in these Regulations.

6.8.6 Maintenance Guarantee. A maintenance guarantee providing surety equal to (10%) of the total value of work within the subdivision which has been subject to either a bond and/or covenant, to be held in same manner as the performance guarantee required herein. Such maintenance guarantee shall be held by the Town for the maintenance of streets and municipal services for eighteen (18) months after completion of construction and installation or until the streets are accepted by the Town, whichever comes first, after which date the Town shall return the remainder of the bond to the person or persons who furnished same.

Approximately sixty (60) days before the expiration of the eighteen (18) month period specified above, the Planning Board shall request its engineer to make an inspection of said street or ways or portion thereof to determine whether or not it should recommend to the Board of Selectmen the laying out of said street or way or portion thereof as a public way. If the recommendation is in the affirmative, the Planning Board shall so advise the Board of Selectmen forthwith, including in such recommendation notification that the eighteen (18) months for which the applicant is responsible for maintenance of said way or portion thereof will expire on a certain date and said way may be laid out as a public way.

Upon the expiration of the period for which the applicant is

responsible for maintenance of said way, if said applicant has complied with all the requirements of the Planning Board, and surety held by said Board for the maintenance of said way shall be returned forthwith to the applicant.

6.9 AMENDMENT, MODIFICATION OR RESCISSION OF APPROVAL

Pursuant to G.L. c. 41, s. 81W, the Planning Board may, upon its own motion or upon the request of the applicant, amend, modify or rescind the approval of a Definitive Plan. Failure to comply with these Rules and Regulations and with the specifications and conditions set forth in the approval of the Definitive Plan shall constitute a basis for such action by the Planning Board. Such action may include the realization upon any security posted by the applicant, the rescission of subdivision approval and all other measures provided by law. No changes or alterations shall be made to any aspect of an approved Definitive Plan without resubmission for approval of the Planning Board in accordance with General Laws, Chapter 41, Sections 810 and 81W.

6.10 MODIFICATION OF DEFINITIVE PLAN

6.10.1. Procedure.

The procedure for the modification of a Definitive Plan, pursuant to G.L. c. 41, s. 81W, shall conform to the requirements for approval of an original Definitive Plan as set forth herein.

6.10.2 Change of Lot Lines.

Pursuant to G.L. c. 41, s. 810, certain changes of lot lines may be approved by the Planning Board without a public hearing.

6.10.3 Effect.

The modification of a Definitive Plan shall not affect lots sold or mortgaged by the applicant in accordance with G. L. c. 41, s. 81W.

6.10.4 An applicant is advised that where a Definitive Plan is subject to later approvals, such as those of the Conservation Commission, Board of Health, or any other local, state or federal agency, and those result in modification(s) other than those allowed by G.L. c. 41, s. 810, the applicant shall modify the plan pursuant to G.L. c. 41, s. 81W.

6.11 RELEASE OF PERFORMANCE GUARANTEE

6.11.1 General.

Upon completion of required improvements, security for the performance of which was given by the bond, deposit, or covenant, or upon the performance of any covenant with respect to any lot, the applicant, at his expense, shall send by Registered or Certified Mail to the Town

Clerk and the Planning Board a written statement that the said construction or installation which has been secured in connection with such bond, deposit, covenant or agreement, has been completed in accordance with the requirements contained within these Rules and Regulations. Such statement shall contain:

1. Name and address of applicant.
2. A Compliance Certificate signed by the applicant and signed and sealed by his Engineer stating that the development has been completed according to the Rules and Regulations of the Planning Board and the Bylaws of the Town of Scituate.
3. Copies of or reference to the requisite number of Inspection Forms and Reports.
4. An As-built Plan (see below).
5. A written certification by the Planning Board's engineer that construction of all ways and sidewalks, installation of monuments, street signs, pavement, lighting, gutters and curbs, required grading and drainage, water mains, hydrants and appurtenances, all sewer mains and appurtenances and planting and seeding has been completed in accordance with the Definitive Plan.
6. A written certification by the Board of Health that the installation of sewage disposal facilities, if applicable, and provisions for surface drainage of all lots has been performed in accordance with the Definitive Plan and the requirements of the Board of Health.
7. A written certification by the Conservation Commission that all work including any required improvements has been performed in accordance with any applicable Orders of Conditions or other requirements.
8. Copies of or reference to the necessary instruments, executed by the applicant, transferring to the Town all utilities and easements as shown on the Definitive Plan (see below).

6.11.2 Refusal.

If the Planning Board determines that said construction or installation has not been completed, it shall specify to the Town Clerk and to the applicant, in writing; by Registered or Certified mail, return receipt requested, the details wherein said construction and installation shall have failed to comply with the requirements contained within these Rules and Regulations.

6.11.3 Constructive Release.

Upon failure of the Planning Board to act on such application within forty five (45) days after receipt thereof by the Town Clerk and the Planning Board, all obligations under the bond shall cease and terminate by operation of law, and any deposit shall be returned and any covenant shall become void. In the event that said forty five (45) day period expires without such specification, or without the return of the deposit or release of the covenant as aforesaid, the Town Clerk shall issue a certificate to such effect, duly acknowledged, which may be recorded.

6.11.4 Conveyance of Utilities and Easements to the Town.

Prior to the release by the Planning Board of a surety bond or deposit, or, in the case of a covenant, the issuance of a Release Form, the applicant shall execute an instrument, on a Form approved by the Planning Board, transferring to the Town, without cost, valid unencumbered title to all common sewers, storm drains and water mains, and appurtenances thereto, constructed and installed in the subdivision in the specific portion thereof to be approved, which in most cases shall be limited to those within the road layout, and conveying to the Town without cost and free of all liens and encumbrances, perpetual rights and easements to construct, inspect, repair, renew, replace, operate and forever maintain the aforesaid underground utilities, with any manholes, pipes, conduits and other appurtenances, and to do all acts incidental thereto, in, through and under the whole of all streets in the subdivision or portion thereof to be approved, and if any such utilities have been constructed and installed in land not within such streets, then in, through and under an easement as shown on the Definitive Plan.

6.11.5 As-Built Plans.

The following as-built plans and profiles, prepared by a Registered Professional Engineer or Registered Land Surveyor, shall be submitted to the Planning Board following the completion of construction and, in addition, at such time during the course of construction as required by the Director of Public Works. The applicant's engineer of record shall provide a stamped certification to the Department of Public Works and the Planning Board that all construction conforms to the As-Built Plans. Detailed checklists for the items required are available from the Department of Public Works. A completed checklist must be submitted for each item.

1. A street layout plan, clearly and legibly drawn with waterproof ink upon linen, mylar, or their equivalent, at a scale of 1"=40', in form approved by the Planning Board's engineer as suitable for submission to the Town Meeting for street acceptance for purposes and for filing in the Plymouth County Registry of Deeds.
2. A plan and profile, clearly and legibly drawn with waterproof ink upon linen, mylar, or their equivalent, or prepared on

another suitable, permanent reproducible material, at a scale of 1"=40', detailing street locations, house locations, if any, and grades and the location and elevation of all underground utilities and appurtenances, including rim grades, percent of slope for sewer and drain lines, and contours, of two foot (2') intervals, for a distance of forty feet (40') from the sideline of any street layout, utility easement, the boundaries of any Flood Plain and Watershed Protection, and/or the boundary of any area which the Conservation Commission has previously determined to be subject to General Laws, Chapter 131, Section 40, "as built."

3. The Engineer shall obtain, from actual field survey and other sources as may be necessary, such information as is necessary to properly identify any "as built" locations of all underground utilities.

SECTION 7. DESIGN STANDARDS

7.1 GENERAL

All proposed building lots shown on a Subdivision Plan submitted to the Board for approval shall contain at least the minimum area and frontage required by the Zoning District in which the land is located.

7.2 STREETS

Subdivisions shall be designed such that, in the opinion of the Planning Board, the subdivision has adequate access from the existing street system, and the subdivision has adequate vehicular and pedestrian access and circulation within the subdivision.

7.2.1 Streets within the Subdivision.

1. Location.

All streets in the subdivision shall be designed so that, in the opinion of the Board, they will provide safe vehicular and pedestrian travel, a minimum of impact on the natural environment and an attractive street layout in order to obtain the maximum safety and amenity for future residents of the subdivision, and they shall be in accord with these Rules and Regulations of the Planning Board.

The proposed streets shall conform in location, so far as practicable, to any existing plans of the Planning Board, to the Master Plan or parts thereof adopted by the Planning Board and, where required by the Board, to the existing street system. In addition, all new street layouts shall meet the following requirements:

- a. Provision satisfactory to the Planning Board shall be made for the proper projection of streets, or for access to adjoining property, whether or not subdivided.
- b. The Planning Board may require the installation of bikeways and/or walkways to provide access within a subdivision or between a subdivision and adjoining properties.
- c. Minor streets shall be so located and designed as to discourage their use by through traffic.
- d. Streets shall be continuous and in alignment with existing streets, as far as practicable, and shall comprise a convenient system with connections adequate to insure free circulation of vehicular travel.
- e. Reserve strips prohibiting access to streets or adjoining property shall not be permitted, except where, in the opinion of the Planning Board, such strips shall

be in the public interest.

- f. No road may be constructed over a soil absorption system or septic system structural component other than a forced main or transport pipe.

2. Alignment.

To ensure the maximum safety and amenity for future residents of the subdivision and the Town, all streets in the subdivision shall be designed so that, in the opinion of the Board, they will provide the following:

- a. Streets entering opposite sides of a minor or secondary street shall be laid out either directly opposite one another, or with a minimum offset of one hundred twenty five (125) feet between their centerlines.
- b. Streets entering opposite sides of a major street shall be laid out either directly opposite one another, or with a minimum offset determined on the basis of a traffic analysis by a qualified professional engineer registered in Massachusetts. The analysis shall include, but not be limited to, evaluation of sight distances, horizontal and vertical alignment of the existing and proposed streets, and prevailing speeds on the existing street. In any case, the offset shall not be less than two hundred fifty (250) feet.
- c. Streets entering on the same side of a minor or secondary street shall be offset a minimum of two hundred fifty (250) feet between their centerlines.
- d. Streets entering on the same side of a major street shall be offset a minimum distance determined on the basis of a traffic analysis by a professional engineer registered in Massachusetts, as described in Paragraph b., above. In any case, the offset shall not be less than 250 feet.
- e. Street intersections shall be designed with the following corner sight distances along the street(s) not controlled by Stop signs:

Minor Streets:	one hundred and fifty (150) feet
Secondary Streets:	two hundred and fifty (250) feet
Major Streets:	as determined by traffic analysis, including evaluation of prevailing (85 th percentile) speeds

The required corner sight distance is based on the AASHTO standard for stopping distance at indicated speeds and includes the sum of the brake reaction distance and the braking distance. The corner sight distance shall be measured from the eye of a driver

(height: 3.5 feet) on the Stop sign controlled street to an approaching vehicle on the intersecting street (height: 4.25 feet). The assumed location of the driver on the Stop sign controlled street shall be no less than 15 feet from the edge of the traveled way on the intersecting street.

- f. Streets shall be laid out so as to intersect as nearly as possible at right angles, and no street shall intersect any other street at less than sixty (60) degrees.
- g. All reverse curves on major and secondary streets shall be separated by a tangent at least one hundred (100) feet long.
- h. Street right-of-way lines at intersections shall be rounded to provide a radius of not less than forty (40) feet. The radius of the edge of pavement at any intersection shall be sufficient to provide for adequate access by fire protection equipment, as determined by the Scituate Fire Department, but in no case shall be less than 30 feet.
- i. The minimum centerline radii of curved streets shall be as follows:

Minor Streets:	one hundred fifty	(150)	feet
Secondary Streets:	four hundred	(400)	feet
Major Streets:	five hundred	(500)	feet
- j. Road alignments should be designed to minimize the total amount of grading and the area of clearing that will be necessary for construction.

3. Street Width.

A Table of Street Dimensions, showing pavement width, layout width, location of sidewalks, and other typical horizontal dimensions for streets of different classifications is provided in **Appendix B, Charts, Diagrams and Tables.**

- a. The minimum width of street rights of way shall be as follows:

Minor Streets:	forty two	(42)	feet
Secondary Streets:	fifty	(50)	feet
Major Streets:	sixty	(60)	feet
- b. In extending a street from one of a different width, the adjustment shall be gradual and subject to the approval of the Planning Board.
- c. Except as provided in paragraph b. above, the side lines of all streets, rights of way, and easements shall be parallel unless otherwise specified by the Planning

Board.

4. Grade.

- a. The centerline grade for any street shall not be less than three quarters (0.75) of one percent.
- b. The maximum centerline grades shall be as follows:

Minor Streets:	nine	(9)	percent
Secondary Streets:	eight	(8)	percent
Major Streets:	six	(6)	percent
- c. No centerline gradient is to exceed six (6) percent on any horizontal curve.
- d. No centerline gradient is to exceed six (6) percent within five hundred (500) feet of a dead end.
- e. No street shall intersect another street at a gradient in excess of two (2) percent for a distance of at least one hundred (100) feet from the intersection of the street centerlines.
- f. Low points in street profiles shall not be located in cut areas.

5. Stopping Sight Distance.

Stopping sight distance is the sum of the brake reaction distance and the braking distance required for stopping a vehicle when a driver sees an obstacle in the roadway. The distance is measured along the horizontal alignment of the roadway, and assumes a 6 inch height of object in the roadway at any point along the vertical curve and a driver's eye height of 3.5 feet above the pavement. These measurements are illustrated by a diagram entitled Stopping Sight Distance in **Appendix B, Charts, Diagrams and Tables**.

All changes in grade exceeding five tenths (0.5) of one percent shall be connected by vertical curves of sufficient length to afford the following minimum stopping sight distances:

Minor Streets:	one hundred and fifty	(150)	feet
Secondary Streets:	two hundred and fifty	(250)	feet
Major Streets:	five hundred	(500)	feet

In no case shall any vertical curve be less than one hundred (100) feet in length.

6. Dead End Streets.

- a. For the purpose of this paragraph, any proposed street which intersects solely with a dead end street shall be deemed to be an extension of the dead end street.

- b. Dead end streets shall not be longer than six hundred (600) feet measured along the center line from the edge of the layout of the through road from which they are entered to the center of the cul-de-sac, or the mid-point of the turnaround for dead-end streets lacking a cul-de-sac.
- c. Such streets shall have provided at the closed end a cul-de-sac (turn-around) having an outside street line diameter of at least one hundred (100) feet and in no case having an outside street line diameter less than that which is determined necessary by the Department of Public Works for the turning of emergency vehicles and school buses.

At the discretion of the Planning Board, landscaped islands may be required within cul-de-sacs. Should a landscaped island be provided within such cul-de-sac, said island shall have a minimum diameter of seventeen (17) feet; shall in no instance reduce the minimum width of pavement to less than required by the Typical Cross Section; shall not impede the turning of emergency vehicles and school buses in the cul-de-sac, and shall have curbing along its entire circumference.

- d. The Board may require a roadway and/or utility easement from the end of the dead-end street to accommodate any projection thereof provided for under this section.
- e. When a Definitive Plan shows a proposed extension of a street which previously ended in a cul-de-sac or turnaround, the Board may require removal of excess pavement in the cul-de-sac and other improvements deemed necessary for the function and appearance of the extension as a condition of approval of the Definitive Plan subject to approval by the Board of Selectmen if required.

7. Curb Cuts.

- a. Driveways in subdivisions containing one (1) and/or two (2) family dwellings shall be at least ten (10) feet and not more than fourteen (14) feet wide, shall have an opening at the gutter line of at least sixteen (16) feet and not more than twenty two (22) feet, and, where curbing is required, a sloped curb at the intersection with the roadway.
- b. Driveways for multiple dwellings and all nonresidential uses shall be at least sixteen (16) feet and not more than twenty two (22) feet wide, shall have an opening at the gutter line of at least twenty (22) and not more than twenty six (26) feet, and, where curbing is required, shall have a curb return at the roadway of

three (3) feet in radius.

- c. Where no curbs exist, the driveway flare shall have a three (3) foot radius.
- d. Driveway cuts shall not be located within sixty five (65) feet of the intersection of the nearest tangent lines of intersecting streets.
- e. There shall be a grade from the edge of the street right of way to the edge of the pavement of not less than one (1) percent and not more than eight (8) percent, but the grade between the sidewalk and the right of way shall be only as shown on the Typical Roadway Cross Section in **Appendix B, Charts, Diagrams and Tables.**
- f. Curb cuts shall be located to allow construction of driveways without crossing over a soil absorption system or septic system structural component other than a forced main or transport pipe.

8. Curbing

- a. In Type II, Type III and Type IV subdivisions, vertical granite curbing shall be installed along each edge of the roadway in all streets.
- b. In Type I subdivisions, granite curbing shall be installed at intersections of all streets along the circumference of the roadway for the full length of the rounded curve plus a straight section at each end of at least six (6) feet in length.
- c. In Type I subdivisions, required curbing shall be set to fit the inside edge of each shoulder as shown on standard detail sheets on file with Department of Public Works. Curbing may be granite or concrete and may be sloped or vertical, but in all cases materials and dimensions must conform to the requirements of the MDPW and a determination of the Scituate Planning Board.
- d. Curbing shall be installed along the outer circumference of all cul-de-sacs for the full length of the rounded curve plus a straight section at each end of at least six (6) feet in length.
- e. At the end of any section of curbing, and to either side of any curb inlet not otherwise abutted by curbing, a four foot (4') taper shall be provided, as shown on standard detail sheets on file with the Department of Public Works.
- f. A Cape Cod berm shall be provided wherever no curbing is provided.

9. Sidewalks.

- a. Sidewalks having a width of not less than five (5) feet shall be constructed beside the roadways within a subdivision, as shown on the Typical Cross Section, as follows:
 - 1) Type I Subdivisions: On one side near schools and other generators of pedestrian travel, and on secondary and major streets as determined by the Board.
 - 2) Type II Subdivisions: On one side only.
 - 3) Type III and IV Subdivisions: On both sides.
- b. Sidewalks shall have a finished grade in relation to the finished grade of the roadway as shown on the Typical Cross Section for streets of similar type and width.
- c. No utility poles or trees shall be placed within the grass plot so as to be closer than two (2) feet from the edge of the roadway or shoulder, if any. In those instances where only one (1) sidewalk is provided, utility poles would normally be placed on the side opposite the sidewalk, as shown on the "Typical Cross Section", except where guying and clearance requirements result in a pole(s) on the sidewalk and/or both sides of the street.

10. Accessibility.

Sidewalk ramps, where sidewalks are required, designed and constructed in accordance with the Rules and Regulations of the Massachusetts Architectural Access Board (521 CMR 21) shall be provided at all intersections, with the exception that sidewalk widths shall be at least 5 feet, as specified in these Subdivision Rules and Regulations. See details of sidewalk and ramp construction found on standard detail sheets on file with the Department of Public Works. Where sidewalks are constructed, a 3 foot width shall be maintained without obstructions in order to accommodate wheelchairs, strollers and comfortable pedestrian traffic.

11. Community Facilities.

Community mail boxes in locations approved by the Post Office, and standing areas for children to wait for the school bus in locations approved by the School Department, shall be shown on the plan.

7.3 UTILITIES

All utilities shall be installed at the time of initial construction in accordance with the following:

7.3.1. Storm Drainage

1. General Approach.

A complete storm drainage system, designed to the satisfaction of the Board, shall be so laid out and of sufficient size as to permit unimpeded flow of all natural waterways, to provide adequate drainage of all portions of the street system so that water does not accumulate thereon, to intercept storm water runoff from the adjacent lots of the subdivision, and to prevent adverse impacts due to stormwater discharges from the subdivision.

Stormwater shall be recharged on the site to the maximum extent feasible. If possible, the stormwater from each lot should be recharged on that lot. Where stormwater cannot be infiltrated into the ground by sheet flow or by a specifically designed recharge system, water collected by the drainage system should be detained on site and treated by stormwater quality management systems before discharge.

Open drainage systems that provide a high level of infiltration, require little maintenance, and result in a minimum of clearing and grading (such as grassed swales or undisturbed natural areas suitable to absorb stormwater) are generally considered superior to closed drainage systems. A system of multiple smaller drainage systems is preferable to a single larger drainage facility. The applicant should also refer to Sections 6.3.3 7. and 7.4 of these Regulations regarding **Control of Erosion and Sedimentation** during and after construction.

2. Design Basis and Method.

Drainage systems shall be designed to comply with the following:

- a. The drainage collection systems within the subdivision (catchbasins, pipes, open channels and other collection facilities) shall be designed to convey projected peak flow rates based upon the twenty-five (25) year storm, based on precipitation rates found in the table entitled **Rainfall Intensity Data** provided in **Appendix B, Charts, Diagrams and Tables**, utilizing the Rational Method as described in . Duration of the design storm for each conveyance component shall equal the time of concentration at its inlet. Overland flow T_c shall be estimated using the chart titled **Overland Flow Time** in Appendix B.
- b. Where the collection system conveys flows to a detention/retention system designed to control the one hundred year storm, the designer shall document how flows in excess of collection system capacity will be safely directed to the control device.

- c. Calculations for the analysis of pre- and post-development peak flows at the property line and at other critical locations, and for the design of detention/retention devices, shall be developed using the Natural Resource Conservation Service (NRCS) TR-20 methodology, unless otherwise authorized by the Planning Board. See 7.3.1.4.d for further requirements regarding the design of detention/retention devices.
- d. The development of runoff coefficients (e.g., for the Rational Method) and Runoff Curve Numbers (e.g., for TR-55 and TR-20 methodology) for post-development conditions shall be based on the assumption that the contributing watershed will be fully developed, including the following conditions:
 - 1.) Proposed lots shall be assumed to be fully covered by homes and accessory structures, paved drives and walkways, and grassed lawns. For purposes of drainage analysis, areas intended to remain in natural condition shall be considered as "grassed lawn", except as noted below.
 - 2.) Where the applicant demonstrates to the satisfaction of the Board that a portion of the subdivision will be permanently preserved in its natural condition, a post-development runoff coefficient or curve number corresponding to that natural condition may be used in the calculations. Otherwise, the coefficient or curve number for "grassed lawn" shall be used.
 - 3.) Runoff coefficients and curve numbers for off-site areas contributing to the Subdivision's drainage system shall be estimated assuming full development of those areas, consistent with the Scituate Zoning Bylaw and these Rules and Regulations.
- e. All stormwater system components shall be designed accounting for hydraulic losses through the system, including inlet losses, outlet losses, and losses through hydraulic structures. Drainage design shall account for anticipated tailwater conditions. Where applicable, tidal effects shall be taken into account in the design of the storm drainage system.
- f. **Federal, State and Local Design Requirements.**
Drainage design shall be consistent with the Massachusetts Department of Environmental Protection Stormwater Management Policy, the federal NPDES Stormwater Permit program for the Town of Scituate, the *Massachusetts Erosion and Sedimentation Control Guidelines for Urban and Suburban Areas* prepared for the Massachusetts Department of Environmental Protection, March, 1997, and all other Town of Scituate bylaws

governing disposal of stormwater in the Water Resource Protection District. Within the Water Resource Protection District, drainage design shall result in removal of 90% or greater of total suspended solids (TSS) from stormwater runoff on an annual average basis.

g. **Separation between Infiltration Devices and Septic Systems.**

A note shall be added to the plan citing use and general location of dry wells, roof leaders and other individual on-site stormwater management systems in order to facilitate adequate separations for septic systems.

h. **Discharge onto Abutting Lots.**

After full construction of the subdivision including all buildings, paved areas, and new landscaping, peak stormwater flows at the boundaries of the development shall not exceed peak flows prior to development measured in the same locations, based on the two, ten and hundred-year, twenty-four hour design storms. Stormwater volumes shall also be controlled so that if they exceed the volume prior to development at the same location based on the two-, ten- and hundred-year, twenty-four hour design storm there will be no increased negative impact on the abutting properties. In reviewing the function of a proposed drainage system, the Board may consider the effect of the system at existing off-site flow restrictions, within a reasonable distance of property boundaries. No flow shall be conveyed over town ways, or over land of others except for existing natural flows, unless a drainage easement therefore is obtained prior to approval of the Definitive Plan.

i. **Discharge to Wetlands.**

Existing wetlands cannot be used for stormwater treatment. However, where groundwater and surface water hydrology permit, and conditions favor creation of functional wildlife habitat, created wetland stormwater systems are encouraged.

j. **Wet Basins.**

Where detention basins are proposed to hold water for longer than forty-eight hours, the proposal must show how mosquito and insect control will be addressed.

k. **Use of Natural Areas for Infiltration.**

The following methods for protecting natural drainage areas are encouraged for increased stormwater infiltration and erosion control, and may be required if determined to be necessary to reduce the volume of stormwater that must be routed through detention/retention devices, to decrease stormwater flows off the site, to increase absorption of runoff on the site, or

to reduce erosion and control sedimentation within natural or man-made drainage systems:

- 1.) Restriction of land clearing to defined areas necessary to accommodate new streets, utilities and dwellings. Area for homes sites within the lots shall not be cleared until a building permit is obtained. The Planning Board may require that stakes be set to mark the boundaries of areas to be cleared, and that these boundaries be inspected by the Town Planner prior to clearing.
- 2.) Provision of undisturbed natural buffer areas, including buffers up to seventy-five (75) feet in width around the perimeter of a subdivision between cleared areas and abutting properties if determined to be necessary for control of stormwater;
- 3.) Provision of natural buffer areas between detention devices and adjacent structures or uses;
- 4.) Where appropriate, provision of buffer areas between any point source discharge and surface waters, wetlands, or areas subject to flooding.

1. **Site Clearing Prior to Submission of Plan.**

In order to preserve natural vegetation which provides areas of high runoff absorption on the site, site preparation, tree cutting, filling, grading and other work done in anticipation of subdivision approval shall not be performed prior to submission and approval of a Definitive Plan. The Board reserves the right to disapprove any such work, and to order restoration of the site, upon filing of a Preliminary Plan or Definitive Plan application.

m. **Connection to the Municipal Drainage System.**

When a drainage system for a subdivision is proposed to connect to the municipal drainage system, the applicant must demonstrate that the municipal system is presently functioning adequately from the point of connection to the point of natural discharge, and that it has the capacity to receive stormwater discharged by the proposed subdivision.

An existing municipal drainage system will be considered to function adequately if the applicant documents the following:

- 1.) The system is in good repair;
- 2.) The system can convey peak discharges without surcharging, under post-development conditions, for the 25-year frequency storm (surcharging refers to the condition where flows cannot be contained

within the drainage system, including piping and structures, during conveyance of the design storm);

- 3.) Connection to the system will not violate any permit conditions applicable to the municipal system under the federal NPDES stormwater program.

The DPW shall inform the Planning Board of (1) whether the drainage system is functioning adequately, (2) the expected impact, if any, of the proposed connection and (3) any way(s) this impact can be mitigated. If an applicant wishes to connect to a municipal drainage which the Planning Board determines, after consulting with the Department of Public Works, is not functioning adequately, the applicant shall be required to make on- or off-site improvements to the municipal drainage system. Applicants are encouraged to offer improvements to the municipal drainage system that will increase its capacity.

3. Maintenance of Drainage, Stormwater Management Systems and Subdivision Amenities by Homeowners.

Until a street within a subdivision is accepted by Town Meeting as a public way, all drainage systems within the subdivision it serves shall be operated and maintained by the developer or a Homeowner's Association made up of the residents of the subdivision or their representatives. Street acceptance by the Town shall generally be limited, as to drainage, to the storm drainage system within the street layout.

Homeowner's Agreements may include language concerning the maintenance of shared septic systems where this language is approved by the Board of Health prior to approval of the Definitive Plan.

After a street is accepted by the town, those components of the drainage and stormwater management system located outside the street layout such as detention/retention devices and their outfalls, pipes conveying stormwater to a municipal drainage system where such connection has been authorized by the town, and any other similar facilities for stormwater management shall continue to be maintained by the Homeowner's Association. The developer shall inform the Planning Board within seven (7) days of the date that his/her maintenance responsibilities are assumed by the Homeowner's Association.

Note on Plan. The Board reserves the right to require that a note be placed on the plan and on subsequent transfers of titles stating that lots are subject to a Homeowner's Agreement which assigns to the owners the costs of inspection and maintenance of specified components of the stormwater management and drainage system, and any other specified common amenities, and that these facilities will be operated

and maintained by a Homeowner's Association.

4. Storm Drainage Structures and Appurtenances.

a. Catchbasins.

Catchbasins shall be located in pairs, one on each side of the roadway, at all low points or sag curves in the roadway, at intervals of not more than two hundred and fifty (250) feet on continuous grades of the roadway, and at or near the corners of the roadway at intersecting streets. Each catch basin shall connect directly to a manhole. Additional catchbasins may be required based on the capacity of inlet grates to pass anticipated design flows.

b. Manholes.

Manholes shall be located at all changes in direction, either horizontally or vertically, of a drain line or at the intersection of two (2) or more drain lines, or so located that no drain line of a length greater than two hundred and fifty (250) feet would exist without either a catchbasin or a manhole.

c. Pipe Conveyance Systems.

All pipe conveyance systems (excluding outlet structures) shall be designed to convey the 25-year frequency storm, with peak discharge rates determined using the Rational Method. All storm drain pipes shall be a minimum of twelve (12) inches in diameter. The minimum design velocity shall be three (3) feet per second and the maximum design velocity shall be ten (10) feet per second.

d. Detention/Retention Devices.

Detention/retention devices include, but are not limited to, detention basins or ponds, retention basins or ponds, swales, infiltration devices, or any device that can change the rate of flow through the use of storage in the device. Detention basins or ponds and retention basins or ponds may not be located on an easement on a proposed building lot but shall be located on separate parcels.

Detention devices shall be designed with the top of any bank normally being no less than 5 (five) feet in width to facilitate mowing and/or other maintenance. A width greater than 5 (five) feet may be required for the embankment's structural integrity. All detention/retention basins shall be provided with a means of access to allow maintenance, repair and emergency response.

1.) **Design Calculations for Detention Devices and Outlet Structures.** All detention devices and associated outlet structures shall be designed

based on hydrologic/hydraulic analysis using the following methodology:

- a.) Runoff hydrographs shall be developed using the following:
 - i. NRCS (U. S. Department of Agriculture, Natural Resources Conservation Service) Type III rainfall distribution
 - ii. NRCS Runoff Curve Number Method of Abstractions or comparable methodology
 - iii. NRCS Unit Hydrograph or comparable methodology.
- b.) Runoff hydrographs shall be routed through the detention structure using the Storage-Indication method or comparable method, and shall include:
 - i. Routing of the full runoff hydrograph through the structure
 - ii. Calculations deriving the stage/ storage/ discharge rating curve for the outlet structure, accounting for tailwater conditions.
 - iii. Hydrologic parameters (Runoff Curve Number, time of concentration), shall be estimated using NRCS TR-55 or a comparable methodology. Examples of models that meet these criteria include: NRCS TR-20, US Army Corps of Engineers HEC-1 or HEC-RMS, US EPA Storm Water Management Model (SWMM).

2. **Fencing.**

Detention devices which are expected to contain water or have a steeper than 3:1 interior slope shall normally be fenced for the purpose of safety. However, the Board may waive the requirement for fencing when the applicant can demonstrate that public safety and emergency access have been satisfactorily addressed by an alternative design.

The location and type of fencing for all proposed detention basins shall be shown on the Definitive Plan, with details of the proposed dimensions, materials and design. Location, height, design and materials of fencing shall be subject to the approval of the Board. Provision should be made to allow wildlife to pass under any fencing.

3. **Natural Appearance.**

Detention and retention basins or ponds should be designed to have a natural appearance. Rounded

shapes are preferred for the footprint, and rectilinear shapes should be avoided.

e. **Subdrains.**

In areas where the finished grade of the roadway is less than four (4) feet above the water table or in other areas where, in the opinion of the Board, the subgrade must be drained, a system of subdrains may be required. The subdrain shall consist of a minimum of one (1) longitudinal drain located so as to intercept water draining into the subgrade.

In addition, laterals shall be required as directed by the Board in areas in which an undue amount of water could accumulate in the subgrade. The system of subdrains shall be discharged into the storm drainage system through a catchbasin or otherwise disposed of in a manner satisfactory to the Board. Subdrains shall be constructed in accordance with Massachusetts Highway Department standards and specifications.

f. **Outfalls.**

Outfalls shall be located so as to prevent adverse impacts to existing natural resources or abutting properties. All outfalls shall be designed so as to prevent an erosive condition. All outfalls shall extend to a location where they can drain along natural drainage paths or other appropriate locations. Where an outfall discharges to an abutting property or is set back from a natural drainage way or wetland resource area, the applicant shall demonstrate the discharge will be safely conveyed without erosion, sedimentation or other adverse impact.

All pipe used shall have a capacity of at least twenty-five (25) percent greater than required by the calculations and shall be no less than 12" in diameter. All pipe discharges and headwalls shall be designed in accordance with Massachusetts Highway Department standards and specifications.

Outlet protection shall consist of a properly designed riprap apron, plunge pool or other energy dissipation structure, or level spreader satisfactory to the Board. Stone for riprap and plunge pools shall be sized in accordance with NRCS procedures or a comparable method. Materials for stone shall conform to applicable provisions of Massachusetts Highway Department standards and specifications.

g. **Culverts.**

Where necessary for control of streams or other natural waterways, culverts shall be designed on the assumption that the entire drainage area is built out to that intensity and in the manner currently allowed by the

Zoning Bylaw. The calculations necessary to determine the size of any culvert which carries a brook, stream, river, or other natural waterway shall be submitted to the Board for review.

All culverts shall have a concrete headwall at each end and any culvert over thirty-six (36) inches in diameter shall include at the upstream end additional protection, as approved by the Board, for roadway side slopes. Headwalls shall be constructed in accordance with Massachusetts Highway Department standards and specifications.

7.3.2. Water Supply.

Subdivisions shall be designed to provide adequate water supply to all lots within the subdivision for domestic and fire protection use. Connection to the municipal system shall only be made when, in the judgment of the Planning Board (based on consultation with the Department of Public Works), the system has capacity to accommodate the additional service. Section 6.3.4 Paragraph 3 of these regulations describes the information that must be submitted for this determination and the process whereby it will be reviewed.

1. All subdivisions shall normally be serviced by municipal water supply.
2. In order to obtain municipal water service for a proposed subdivision, the applicant must demonstrate that the municipal water supply has sufficient quantity of water to serve the development, and that this water can be distributed at an adequate pressure for both fire safety and domestic use. The infrastructure for water distribution must be deemed adequate for the proposed use by the Planning Board. In cases where the available water, water pressure or water distribution infrastructure are considered inadequate for the proposed use, the applicant shall be required to make on- or off-site improvements to improve the availability or distribution of water.
3. Water pipes and related equipment, such as hydrants and main shutoff valves, shall be installed within the subdivision as required by the Department of Public Works to provide all lots on each street with adequate water supply for domestic and fire protection use.
4. Where the subdivision is served by municipal water and the property adjacent to the subdivision is not yet subdivided, provisions shall be made for the future extension of the water system to the adjacent property. Water mains of such size and grade as will allow for such extension shall be provided, with extensions to the boundaries of the subdivision. The applicant shall provide easements, as necessary, to accommodate these extensions.

5. The water main within a new subdivision shall connect to the existing municipal system at two or more points, to maximize the effectiveness of the distribution system. The Applicant shall consult with the Department of Public Works, in determining the points of connection to the municipal system. Dead-end water mains will not be approved.
6. Water mains shall be located as shown on the Typical Cross Section.
7. Class 52 cement lined ductile iron pipe designed in accordance with ANS 21.50/SAWWA C150/AWWA C111 shall be used for all water mains. The type and size of pipe, fittings and appurtenances for the water system shall be in accordance with the requirements of the Department of Public Works. In no case shall a water main be less than eight-inch (8") diameter pipe.
8. Copper Type "K" service feeds shall be used for all house connections. All house connections shall be installed in accordance with the requirements of the Department of Public Works.
9. Fire Hydrants. Hydrants shall be provided every five hundred (500) running feet along each proposed road, unless a greater distance is approved by the Fire Chief in writing. In any case there shall be a minimum of one (1) hydrant in each subdivision. Mueller Super Centurion hydrants shall be used as approved by the DPW. 6" pipe shall be required for lateral connections to fire hydrants. The location of hydrants shall be approved by the Fire Chief.

7.3.3. Sanitary Sewage Facilities. Subdivisions shall be designed for the adequate disposal of sanitary sewage from all lots shown on the Definitive Plan.

1. Where the subdivision will be served by one or more on-site sanitary sewage disposal systems, the Applicant shall provide documentation that the provisions for on-site sewage disposal have been reviewed and approved by the Board of Health and other authorities having jurisdiction. All subdivisions expected to produce greater than 10,000 gpd (gallons per day) of wastewater must be served by a package wastewater treatment plant.
2. Where the subdivision is proposed to be served by municipal sewerage, the applicant shall provide documentation that the site has been approved for future sewer connection by the Board of Selectmen in their capacity as Sewer Commissioners, with the manner of connection approved by the Department of Public Works.

7.3.4. Electrical, Telephone and Other Utilities

1. All electrical, telephone, and other utility wires shall be placed underground, unless the Board determines that such placement is not feasible or is not in the best interest of the Town.
2. The design and location of the electrical power distribution system shall be as directed and approved by the Electric Company. Streetlights shall be of a type acceptable to the Electric Company and approved by the Planning Board, and shall be installed at locations approved by the Board of Selectmen.
3. The applicant shall consult the Gas Company relative to the coordination of the installation of gas pipes, if gas service is to be installed.
4. The applicant shall consult the Telephone Company, Television Cable Company, and other applicable utilities relative to the installation of communication services.
5. Electric, telephone, gas, and other utilities shall be located as shown on the Typical Cross Section.

7.4 EROSION AND SEDIMENTATION CONTROL.

All subdivisions shall be designed to prevent erosion and sedimentation as a result of disturbance of the natural landscape and construction of roads, houses, other structures, landscaping, and other subdivision amenities. Applicants are encouraged to consult the Natural Resources Conservation Service or other technical authorities on erosion control, to select appropriate planting and seeding materials for permanent slope stabilization. Applicants should also consider the use of synthetic Turf Reinforcement Materials (TRMs) and Erosion Control Materials (ECMs), as applicable for the permanent and temporary stabilization of steep slopes.

Any proposed methods of preventing erosion and sedimentation shall meet all requirements of the Conservation Commission under 310 C.M.R. 10.00 and the Town of Scituate Wetlands Bylaw, and shall be consistent with: the following design guidelines for erosion and sedimentation, the federal NPDES Stormwater Permit program for the Town of Scituate, and the *Massachusetts Erosion and Sedimentation Control Guidelines for Urban and Suburban Areas* prepared for the Massachusetts Department of Environmental Protection, March, 1997.

1. **General.**
Erosion and sediment control measures shall be designed, in the judgment of the Planning Board, to adequately provide for the following:
 - a. Prevention of erosion of exposed slopes by water or wind;

- b. Prevention of sedimentation of natural watercourses;
 - c. Prevention of sedimentation of municipal drainage facilities;
 - d. Control of dust from construction operations;
 - e. Control and treatment of the discharge of water from the dewatering of excavations required by construction activity;
 - f. Prevention of tracking of earth materials off-site by construction vehicles.
2. All embankments created by cuts or fills, and other areas exposed during construction and not otherwise paved or structurally stabilized, shall be stabilized by vegetation during construction and at completion of the subdivision.

Where other stabilization measures are not proposed, exposed slopes shall be planted with one or more of the following: shrubs normally growing to a mature height of two feet or less, vines or ground cover plantings, or deep rooted perennial grasses.

3. In order to reduce opportunities for soil erosion and sedimentation, street layouts shall be designed to minimize disturbance of natural topography by minimizing horizontal and vertical extents of cuts and fills. Streets shall generally be laid out parallel to or at a slight angle to existing contours, to minimize the interruption of the natural topography. No change shall be made to topography that would adversely affect any land abutting a proposed subdivision.
4. In order to protect natural drainage patterns, the Board reserves the right to limit excessive cuts and fills.
5. If, in the opinion of the Board, excessive vegetation is removed prior to filing a Definitive Plan or due to proposed grades, a Restoration Plan showing proposed replacement vegetation shall be submitted as part of the Definitive Plan application and shall require approval by the Board.
6. During construction of the subdivision and the development of each lot within the subdivision, erosion and sediment shall be controlled in accordance with a plan approved by the Planning Board, and consistent with other applicable regulations under authorities having jurisdiction. See Sections 6.3.3 and 6.3.4 of these Rules and Regulations.
7. The applicant shall provide for the monitoring and maintenance of erosion and sediment control measures throughout the course of construction. The applicant shall

provide for a designated representative whom the Town can contact to address any problems relative to erosion and sediment control during the course of construction, and who will have authority to act on behalf of the applicant to correct such problems.

8. Where unforeseen erosion of a serious nature occurs, the Planning Board or its agent may require additional erosion control measures.

7.5 AMENITIES

7.5.1 Open Space.

Before approval of a Plan the Planning Board may require that the Plan show a park or parks suitably located for playground and recreation purposes or for providing light and air. The park or parks shall be at a location designed by the Planning Board and shall not be unreasonable in area in relation to the land being subdivided and to the prospective uses of such land and shall contain at least one (1) acre of land. Unless otherwise specified by the Board, the total area reserved for such purposes shall be equal to at least ten (10) percent of the total land area shown on the Plan.

Each area so reserved shall be of suitable area, dimensions, topography and natural character for the purposes of a park and/or playground and shall be so located as to serve adequately all parts of the subdivision. The Board may require that the area or areas reserved be located and laid out so as to be used in conjunction with similar areas within adjoining subdivisions or probable subdivisions. The Planning Board may, by appropriate endorsement on the Plan, require that no building be erected upon such park or parks without its approval for a period of three (3) years, during which period such areas may be acquired by the Town as provided by General Laws, Chapter 41, Section 81Q.

7.5.2 Special Landscape Features.

1. Natural Features.

Every effort shall be made to preserve significant natural and cultural features within the subdivision. These significant features include trees, wooded areas, water courses, natural rock outcrops, scenic points, historic structures, open meadows of historic significance, other locations or features of historic or archaeological interest, stone walls, and similar community assets which, if preserved, will add attractiveness and value to the subdivision.

2. Stone Walls.

Wherever feasible, existing stone walls and shade trees twelve (12) inches in diameter or greater shall be incorporated in the design of the subdivision and shall not

be removed. The Board may request that existing stone walls be moved if, in the opinion of the Board, they can be better used in new locations within the subdivision.

7.5.3 Bikeways and Walkways.

Public bikeways or pedestrian walkways may be required by the Planning Board to provide circulation or access to schools, playgrounds, parks, shopping, transportation, open spaces and/or community facilities or for such other reason as the Board may determine.

These bikeways or walkways may or may not be part of normal sidewalk provision, but they shall not be a part of any lot in the subdivision except where located in a bikeway or walkway easement or an easement provided for the potential projection of a street or way.

Such bikeways or walkways shall be designed in accordance with the following:

Minimum right-of-way width:	fifteen	(15)	feet
Maximum pavement width:	eight	(8)	feet
Maximum gradient:	three	(3)	percent except that gradients of up to five (5) percent may be permitted over segments less than one hundred (100) feet in length

Minimum centerline radius: twenty-five (25) feet

7.5.4 Retaining Walls.

The location, general configuration, and length of retaining walls shall be subject to approval by the Planning Board. A building permit shall be required for any retaining wall which holds more than 4' of fill. Before construction of retaining walls which exceed 10' from the base to the top of the wall, certification by a structural engineer shall be submitted to the Building Commissioner. Retaining walls may be permitted when grading is not feasible where it is necessary to accommodate changes in elevation. Retaining walls shall have a maximum height of four (4) feet above ground level and shall be no closer than thirty (30) feet to any lot line except when necessary to stabilize a street or driveway.

The Board may require that retaining walls be screened with plantings and/or treated with a stone-textured veneer. As-built plans for retaining walls shall be provided to the Board and Building Commissioner upon completion of the wall.

7.5.5 Street Trees.

1. The Applicant shall document that the removal of existing street trees in conjunction with the proposed subdivision has been reviewed and approved by the Tree Warden, when such tree removal will occur along a Scenic Road or other location

under the Tree Warden's jurisdiction.

2. The Applicant shall provide street trees along all new subdivision roadways, as specified in Section 8.3.10 of these Rules and Regulations.

7.5.6 Fencing.

If fencing is proposed in conjunction with a proposed subdivision, its location and design shall be subject to approval by the Planning Board. The Applicant shall provide information on the location, height, design, and materials of all proposed fencing.

7.6 EASEMENTS

1. Easements for municipal services shall be provided as necessary and shall be at least twenty (20) feet in width. Where practical, such easements shall be located adjacent to, but to one side of, a lot line.
2. Where a subdivision is traversed by a water course, drainage way, channel or stream, the Planning Board shall require a storm water easement or drainage right-of-way of adequate width and proper side slope to conform substantially to the lines of such water course, drainage way, channel or stream and to provide for construction or other necessary purposes.
3. Access easements to park and conservation land shall be provided, if required by the Planning Board, and shall be at least twenty (20) feet in width.

**SECTION 8. SPECIFICATIONS FOR THE CONSTRUCTION AND INSTALLATION OF
REQUIRED SERVICES**

8.1 GENERAL

1. The applicant shall provide and install all necessary materials, labor, appurtenances and equipment to complete the municipal services as may be required by the Definitive Plan in a manner acceptable to the officials or agency having jurisdiction over the respective service. All costs incurred by the applicant as a consequence of installing and maintaining such municipal services as required shall be paid by the applicant, including all costs which may be incurred for any reasons whatsoever until such time as the Town assumes responsibility for such service or services. The Board will not take any action to have the applicant reimbursed for any costs so incurred.
2. All improvements specified or implied on the Definitive Plan shall be constructed or installed by the applicant in accordance with the provisions of these Rules and Regulations, unless directed otherwise by the Board. Items not specifically mentioned herein shall be constructed in accordance with the latest revision of the Standard Specifications for Highways and Bridges of the Massachusetts Highway Department (hereinafter referred to as the MassHighway Standards), unless specifically directed otherwise by the Board.
3. Prior to the start of any construction, the subdivision, including all way and lot lines and municipal services shall be laid out as to line and grade by a Registered Land Surveyor and a certificate to this effect filed with the Board. Stakes for line and grade, clearly marked with the proper station, shall be placed and shall be maintained throughout construction.

Any work which, in the opinion of the Board or its designated agent, has not been properly laid out or does not conform to the approved Plan may be checked by a Registered Professional Engineer employed by the Board or by the Director of Public Works or his designee. The applicant shall pay all costs which the Board incurs as a consequence of checking the work. The Board shall require the removal and correction or replacement of any work which has been incorrectly laid out.

4. The entire area to be occupied by the roadway plus an additional four (4) feet on either side, or extending outward to the toe of slopes to be excavated, or, in cut sections, to the further side of any sidewalk to be constructed, whichever is greater, shall be excavated to a minimum of four (4) feet below finished grade in cut sections or to such greater depth as may be required by the Director of Public Works if soft or yielding material, clay, peat, silt, sand pockets, bouncers

or rocks, organic materials, or other material detrimental to the subgrade is encountered.

All fill, gravel and undisturbed material shall be non-frost susceptible and shall contain not more than ten (10) percent passing the #200 mesh sieve for a minimum depth of four (4) feet below the finished roadway grade. Trees intended to be preserved shall be protected from injury by suitable boxes, or fenders, or, if in fill, by wells constructed in accordance with MassHighway standards of a diameter at least three (3) feet or three (3) times the tree diameter, whichever is greater.

All work in connection with the installation of utilities and drainage within the roadway must be completed prior to placement of fifteen (15) inch of gravel sub-base.

5. All work in connection with the municipal services shall be left uncovered until such time as the Director of Public Works permits the backfill to be placed. The applicant shall notify all utility companies with municipal services installed or to be installed within the ways as to the date and time when he intends to place the gravel foundation and paving so that such utility company may properly install the utilities and record the location of pertinent features of the system so that they will not be covered or lost as a result of the paving operation.
6. All storm drains, sanitary sewage and water facilities, and gas pipes, if any shall be installed to the street line prior to excavation of the trench for underground electric and telecommunication conduits and prior to installation of the gravel foundation.
7. Underground electric and telecommunication conduits and service connections or any and all utilities from the main structures in the street to the exterior lines thereof for each lot shown on the plan, whether or not there is a building thereon, shall be installed prior to installation of the gravel foundation. Any deviation from this requirement necessitated by unusual topographic or technical difficulties must have the specific written approval of both the Planning Board and the Director of Public Works.

No bituminous concrete may be placed on frozen sub-base in the case of the binder course, or if ambient daytime temperature falls below 50° in the case of the finish/wearing surface.

8. The applicant shall protect all utilities and appurtenances installed under these Rules and Regulations from any and all damage until released from such responsibility as provided in Section IV. B. 6. above. Any damage to these utilities and appurtenances prior to such release shall be repaired by the

applicant in a manner satisfactory to the Planning Board and the Director of Public Works, the full cost of which repairs shall be borne by the applicant.

8.2 UTILITIES

8.2.1 Storm Drainage.

1. Storm drains, culverts, catch basins with curb inlets and manholes shall be installed as shown on the approved Plan. The construction of the drainage system, including methods of construction and quality of materials shall conform to the applicable sections of the MassHighway Standards or as directed by the Director of Public Works.
2. All storm drains shall be reinforced concrete pipe and shall be laid with a minimum of two and one-half (2 1/2) feet of cover over top of pipe. Cover required hereunder may be reduced to provide the appropriate taper at the outfall of a drain line.
3. All pipe joints shall be sealed using rubber gaskets, as approved by the Director of Public Works.
4. All pipe connections to manholes, catch basins, and similar drainage structures shall be made using flexible connections of a type approved by the Department of Public Works.
5. All trench backfill material for the storm and subsurface drains and other backfill within the limits of the way shall conform to the sub-base course requirements and shall be deposited to required subgrade in not more than eight (8) inch layers and compacted to ninety-five (95) percent of the maximum dry density as determined by the modified Proctor Test, in accordance with ASTM D - 1557 - 66T, Method "D". Refer to standard detail sheets on file with the Department of Public Works.
6. Catch basins shall be constructed of pre-cast concrete or of cement concrete blocks, laid in mortar and plastered. A standard square frame and grate and a granite curb inlet shall be furnished and set. All catch basins shall have an inside diameter of at least four (4) feet; shall have a sump at least four feet deep below the invert of the outlet pipe; shall be furnished with a gas trap of a type approved by the Director of Public Works; and shall be constructed in accordance with the latest revisions of the MassHighway Standards.
7. All manholes shall be constructed of the same materials as permitted herein for catch basins except that a standard heavy twenty-six (26) inch diameter cover marked with the word "drain," and frame shall be furnished and set. These and all other details shall be as shown on standard detail

sheets on file with Department of Public Works and shall be in accordance with the latest revisions of the MassHighway Standards. Submerged outlets shall be required only on the last manhole prior to the discharge of the drainage system into a swamp, water body, watercourse, or other natural area.

8. The subdrainage system as shown on the Definitive Plan or as ordered by the Board during construction shall be constructed of not less than eight (8) inch diameter, perforated, high density polyethylene (HDPE) pipe, laid to line and grade. Pipe joints shall be constructed using fittings of the same manufacture as the pipe. Underdrain pipe shall be installed in an envelope of drainage stone extending 8 inches below invert and 8 to 12 inches above top of pipe. The stone shall be wrapped in geotextile filter fabric meeting MassHighway standards.
9. Drains, catch basins, and manholes shall not be backfilled until inspected and approved by the Director of Public Works.
10. All drainage pipe shall end in a concrete or masonry headwall having dimensions and constructed in accordance with the MassHighway Standards. The concrete shall have a minimum compressive strength of three thousand (3,000) pounds per square inch after twenty-eight (28) days curing. Dump stone shall be placed at the outfall in conformance with MassHighway Standard 258.
11. All tide gates shall be subject to the approval of the Director of Public Works and the Conservation Commission, and shall be of standard manufacture, of the same size as the outfall pipe, and shall have a cast iron frame and flap each fitted with a bronze seat.

8.2.2 Water Facilities.

1. All installations of water systems, including house connections to the lot boundary line, shall be as shown on the approved Plan.
2. The Department of Public Works shall approve all new connections to the Town of Scituate municipal water system. The installation of water systems, with their appurtenances, including the methods of construction and quality of materials used, shall be in accordance with the Rules and Regulations of the Department of Public Works and further as directed by the Director of Public Works.

8.2.3 Sanitary Sewer Facilities.

1. All installations of sanitary sewer systems, including house connections to the lot boundary line, shall be as shown on the approved Plan.
2. The installation of sanitary sewer systems, with their appurtenances, including the methods of construction and quality of materials used, shall be in accordance with the Rules and Regulations of the Department of Public Works and further as directed by the Director of Public Works.

8.2.4 Electrical, Telecommunications and Other Utilities.

1. The installation of the electrical distribution system, telecommunication systems, and gas service system shall be as directed by the applicable Electric, Telecommunication, and Gas Companies, respectively. Adequate separation shall be maintained between underground utilities and any septic systems, sewer lines, or other utilities. Watertight utility junction boxes or vaults must be used if needed within thirty (30) feet of a soil absorption area for an individual septic system or its expansion area. A detail of any utility crossing shall be shown on the details drawings and approved by the appropriate authorities and boards.
2. A typical trench detail showing proposed locations of utilities shall be provided on the details drawings of the Definitive Plan.
3. The locations of all utilities shall be shown on As-Built plans.

8.3 STREETS

1. **General.**
All streets, including sidewalks and grass plots, within the subdivision shall be constructed in conformance with the Typical Roadway Cross Section shown in **Appendix B, Charts, Diagrams and Tables**, shall be illustrated on the approved Plan, and shall not deviate therefrom without written permission from the Planning Board. Whenever it is necessary to disturb an accepted street or a completed street not under covenant or security to effect utility connectors or for any other purpose, said street shall be repaired in accordance with the conditions of a street opening permit and the typical section "Restoration of Roadway Pavement," both of which must be obtained from the Scituate Department of Public Works.

2. Sub-Base.

All fill material which may be required within the exterior lines of the way up to the fifteen (15) inch gravel foundation shall be of clean gravel or other suitable material which shall contain not more than ten (10) percent passing the #200 mesh sieve as approved by the Director of Public Works. Such material shall be deposited in layers of not more than six (6) inches for the full width so as to form a roadway foundation which shall at all points be parallel to the finished grade of the roadway surface. The gravel and fill shall be compacted to ninety-five (95) percent of the maximum dry density as determined by the modified Proctor Test, in accordance with ASTM D - 155 - 66T, Method "D". The gravel used for the top fifteen (15) inches of roadway sub-base shall conform to the gradation specified by the Department of Public Works. The Director of Public Works or his designee will inspect the roadway foundation after the compaction of each six (6) inch layer, and, after the approval of the completed foundation, the entire roadway shall be surfaced as provided in Subparagraph 4. Roadway Surface below.

3. Roadway Surface

- a. The Bituminous Concrete Pavement shall be laid in three courses, i.e., two (2) inches of binder; one and a half (1 ½) inches of modified binder and one and a half (1 ½) inches of finish/wearing surface with a finished pavement depth after compaction as shown on the Typical Cross Section.
- b. The methods of construction and the quality of materials used shall conform to the Specifications for Class I Bituminous Concrete pavement Type I-1 of the Massachusetts Highway Department.
- c. All bituminous concrete to be placed in the traveled way, driveway aprons and sidewalks must be inspected at the supplier's batching plant by a Certified Plant Inspector (as certified by Mass. Highway Department,) at the expense of the developer.
- d. No roadway surface shall be placed until all underground utilities, including house connections, have been installed.

4. Sidewalks

- a. Sidewalks shall have a finished grade in relation to the roadway as shown on the Typical Cross Section and shall be constructed of either Bituminous or Portland Cement Concrete. At all intersections the sidewalks shall be

constructed across the grass plot to the edge of the traveled way.

- b. Sidewalks shall be constructed on a gravel foundation which shall be a minimum of fifteen (15) inches in thickness and shall otherwise conform to the requirements for the roadway foundation. At driveway locations, the gravel foundation shall be a minimum of fifteen (15) inches in thickness. In no case shall the surface be laid until the foundation shall have been inspected and approved by the Director of Public Works or his designee.
- c. All sidewalks shall be to a depth of three and a half (3 ½) inches in the case of bituminous concrete and four (4) inches in the case of Portland cement concrete.
- d. Bituminous Concrete sidewalks shall consist of two (2) inches of Type I-1 Binder Course and one and a half (1 ½) inch of Type I-1 Top Course after completion.
- e. Portland Cement sidewalks shall be constructed according to specifications available from the Department of Public Works. The sidewalks shall be at least four (4) inches thick and have a scored joint every four and one-half (4 1/2) feet.

After each four (4) scored sections, there shall be an expansion joint consisting of a preformed joint filler, caulked at the surface with a bead of Thoikol or approved sealer.

All concrete shall be mixed, placed, and cured in accordance with ACI Manuals. No concrete sidewalks shall be constructed later than September 30 in any year.

When the concrete surface has been sufficiently hardened, it shall be treated with two (2) applications of fifty (50) percent boiled linseed oil and fifty (50) percent mineral spirits.

5. Aprons.

Driveways shall be constructed in the same manner as the traveled way. The slope shall be two (2) inches in a distance of five (5) feet from the property line toward the gutter. In no case shall the surface be laid until the sub-base shall have been inspected and approved by the Director of Public Works.

6. Bikeways/Walkways.

Bikeways and walkways shall be constructed in the same manner as sidewalks unless otherwise specified by the Board.

7. Curbing and Berms.

a. Granite Curbing. Curbstone shall be of hard and durable granite, of a light color satisfactory to the Director of Public Works, free of seams which impair its structural integrity, and of a good, smooth splitting appearance. Granite shall come from approved quarries and, when tested, shall have a French coefficient of wear of not less than sixteen (16), or a Los Angeles percentage of wear of not more than thirty-two (32). Test samples shall be hand broken.

1) Dimensions. The stones for the several types of curb and curb inlets shall be cut to the dimensions given in the following table:

Type:	VA-4
Width at Top:	6 inches
Depth In:	17 -19 inches
Minimum Length*:	6 feet
Minimum Width at Bottom:	4 inches (for 2/3 length)

*Minimum lengths do not apply to radial curb and closures.

Type VA curbstones to be set on a radius of one hundred (100) feet or less shall be cut to the curve required, unless otherwise specified by the Director of Public Works.

2) Finish.

Finish and surface dimensions for the several types of curb shall conform to the following requirements:

- a.) The top surface of curbstones shall be sawed to an approximately true plane.
- b.) Exposed arris lines shall be pitched straight and true with no variation from a straight line greater than one-eighth (1/8) inch.
- c.) The back surfaces of curbstones shall have no projection, for a distance of three (3) inches down from the top, which would exceed a batter of four (4) inches in twelve (12) inches.
- d.) The front face shall be at right angles to the plane at the top and shall be smooth quarry

split. Drill holes in exposed parts of the face will not be permitted.

- e.) The front face shall have no projections greater than three-quarters ($3/4$) of an inch or depressions greater than one-half ($1/2$) inch measured from the vertical plane of the face through the top arris line for a distance down from the top of eight (8) inches. The remaining distance shall have no projections greater than (1) inch measured in the same manner.
- f.) The ends of all stones shall be square with the planes of the top and bottom face, and so finished that when stones are placed end to end as closely as possible, no space more than one-half ($1/2$) inch shall show in the joint for the full width of the top or down on the face for eight (8) inches. The remainder of ends may break back not over eight (8) inches from the plane of the joint.
- g.) Curbstones for Type VA curb shall be fit as closely as possible, but not closer to each other than one-eighth ($1/8$) inch.

3) Mortar.

Mortar for pointing joints shall be composed of equal parts of air entrained cement and sand with sufficient water to form a workable mixture. The materials shall conform to the requirements of ASTM C-91 and C-144.

4) Setting Curbstones.

Curb shall be set in cement concrete to bituminous binder grade and at line and grade required, and it shall project seven (7) inches above the finish grade of roadway, unless otherwise directed or called for on the Plan.

b. Cape Cod Berms.

"Cape Cod Berms", eighteen (18) inches in width, shall be installed as shown on the Typical Cross Section, where applicable. Such berms shall be constructed monolithically with the bituminous Binder and Top courses and shall be the same thickness as the bituminous Binder and Top Courses.

8. Grass Plots.

- a. A grass plot shall be provided on each side of all roadways according to the Typical Roadway Cross Section. The finished grade of the grass plot in relation to the finished grade of the roadway shall be as shown on the Typical Cross Section.
- b. The top six (6) inches of grass plots and side slopes (cut and fill) shall be good quality loam as approved by the Director of Public Works and shall be screened, raked, and rolled with a hand roller to finished grade. The loam shall be seeded with lawn grass seed applied in sufficient amounts. Following the completion of roadway and sidewalk construction, the applicant shall perform sufficient cuttings and otherwise maintain the grass plot until released from such responsibility as provided above.

9. Side Slopes.

The area outside the traveled way (cut or fill) shall be sloped at a rate not steeper than three (3) vertically to one (1) horizontally until it intersects the finished grade of the abutting lots, except as it may be required for sidewalks. All such slopes shall be loamed and seeded as required above with regard to grass plots.

Where the final grade of the exterior street line is such that a slope of not more than three (3) to one (1) cannot be maintained, a retaining wall of stone, brick, reinforced concrete or other suitable material satisfactory to the Planning Board shall be constructed outside the street lines in order to support the street and/or adjacent land as the case may be. The construction of retaining walls shall be in a manner approved by the Director of Public Works or Building Commissioner, as applicable.

Erosion and Sedimentation. Materials must be approved by the Planning Board

10. Street Trees.

- a. **Locations and Type of Trees.** Trees shall be located as shown on the Typical Cross Sections of these Regulations, at a minimum average spacing on each side of the street of fifty (50) feet on each side of every street within the subdivision and within twenty (20) feet of the street line, and shall be located a minimum of twenty (20) feet from proposed driveways unless otherwise directed by the Planning Board. Street trees shall be a minimum of 12' in height and 2 ½" caliper dbh

and shall be nursery stock, conforming to the standards of the American Association of Nurserymen, of a species and cultivated variety approved by the Board. At the discretion of the Planning Board, existing trees may be used as street trees.

- b. **Planting.** Street trees shall be planted in a minimum of $\frac{1}{2}$ cubic yard of topsoil and mulched a maximum of 2 $\frac{1}{2}$ " inches deep. Mulching shall be in a circle with the radius beginning three inches from the trunk and extending to the drip line. Trees shall be properly wrapped and guyed to insure survival. The developer will be responsible for the health of all trees planted until such time as the road or roads are accepted as public ways. Prior to town acceptance of the street, the developer shall replace any tree which dies.

11. Street Signs.

The applicant shall furnish and erect, as instructed by the Director of Public Works, at all intersections within the subdivision, street signs to conform with the design of those used by the Town as specified by the Department of Public Works. Such signs shall bear the names of the intersecting streets as shown on the Definitive Plan.

12. Monuments.

Granite or reinforced concrete bounds shall be set at all street intersections, at all points of change in direction or curvature of streets and the subdivision perimeter, and at other points where, in the opinion of the Board, permanent monuments are necessary. Monuments shall be at least four (4) by four (4) inches and shall extend a minimum of three and one-half (3-1/2) feet below finished grade to not more than two (2) inches above the finished grade. The cap shall be as specified by the Board. The bounds shall otherwise conform to the Department's Standards and shall not be set until all construction which could disturb the monument is completed.

Certification, in writing and sealed, shall be made by a Registered Land Surveyor, to the Director of Public Works and the Planning Board, to the effect that, as determined by survey after the completion of construction, the bounds have been properly set in accordance with the approved Definitive Plan and these Rules and Regulations.

13. Cleaning Up.

The entire area of the subdivision shall be cleaned up so as to leave, in the opinion of the Board, a neat and orderly appearance free from debris and other objectionable material. Following the completion of all construction activities, all catch basins, manholes and conduits shall be cleaned.

Following the completion of this and other items of work as required herein, a final inspection will be made by the Planning Board or its agent.

14. Maintenance.

If released from restrictions with regard to the sale of lots or buildings on lots by the posting of performance bond, the applicant or his successors in title shall maintain the roadway for vehicular traffic in a manner satisfactory to the Board. Further, the applicant shall maintain the roadway in a subdivision in a condition which meets all the above requirements to the satisfaction of the Board until released from such responsibility as provided by Section IV. B.6. above. The Planning Board may require a fee to guarantee maintenance of private subdivision roads until such time as the Homeowner's Association begins maintenance or the road is accepted as public by Town Meeting.

SECTION 9.0 ADMINISTRATION

9.1 WORK NOTIFICATION TO TOWN DEPARTMENTS

9.1.1 Notification of Start of Construction.

The Planning Board, Department of Public Works, and Conservation Commission (as applicable) shall be notified of the construction start date at least two weeks prior to the commencement of construction. The Town may at that time retain the services of a consulting engineer to inspect the construction work. Required inspections shall be those outlined in Section 9.1.3 below, and any others deemed necessary by the Planning Board, Department of Public Works or Conservation Commission. If a consulting engineer is retained by the town, the developer shall deposit with the Town sufficient funds to cover the cost of the inspections prior to the commencement of work. The inspection services will be administered through the Department of Public Works.

9.1.2 Preconstruction Conference.

Prior to the initiation of any work within the subdivision, the Director of Public Works shall hold a preconstruction conference to be attended by the applicant, his engineer of record, a representative of the Department of Public Works, the Town Planner, the town's consulting engineer(s), and by such other persons as the Director of Public Works or Planning Board shall require.

9.1.3 Notification.

The Department of Public Works and/or its designee, as the authorized agent for the Planning Board, shall be notified, at least forty-eight (48) hours prior to the commencement of each step of the work as listed below. The Planning Board or the Town Planner shall be separately notified of items #1, 3 and 21, and the Conservation Commission or its Agent shall be separately notified of item #2, with these notifications also to be made at least forty-eight hours prior to the commencement of the work. No work shall commence until after notification is given and acknowledged.

- 1. Staking of roadway limits prior to clearing and grubbing.**
- 2. Placement of erosion control measures.**
- 3. Clearing of trees for roadway construction.**
- 4. Grubbing of roadway.**
- 5. Placement and compaction of roadway sub-base.**

6. Installation of storm drainage facilities.
7. Installation of water and sanitary sewage facilities.
8. Testing of piped utilities and appurtenant structures.
9. Installation of electric, telephone, and other underground conduit systems.
10. Installation of gas mains, if applicable.
11. Placement and compaction of material for roadway gravel.
12. Placement of bituminous concrete binder courses.
13. Placement of bituminous concrete top course.
14. Installation of curbing and curb inlets.
15. Placement of gravel in sidewalks.
16. Placement of bituminous concrete for sidewalks and aprons.
17. Placement of loam for grass plots.
18. Grading of slopes.
19. Construction of retaining walls.
20. Setting of monuments.
21. Notification that all road construction, landscaping and drainage work is complete and in conformance with the Definitive Plan.

9.1.4 Allocation of Risk.

If any of the above designated work is commenced without proper notification being given as specified, such work shall be performed at the risk of the applicant or owner; and the Director of Public Works may order the removal thereof at the expense of the applicant or owner.

9.2 INSPECTION

Prior to the start of construction in a subdivision, the Planning Board will designate either the Director of Public Works or his designee or another authorized Engineer selected by the Planning Board to be responsible for periodic inspection of construction. The inspector

will utilize the standard inspection form (Form O) and will sign the form after the satisfactory completion of each work item described thereon.

All inspections however performed shall be at the expense of the applicant. Subdivision surety will not be released until all such expenses have been paid to the Board.

The following inspections of the required improvements will be made by the Director of Public Works or his designee, acting as authorized agent of the Planning Board. The Town Planner shall be notified of the time and date of each of the following seven inspections. These inspections may be in addition to any other inspections the Board may make or cause to be made.

1. **First Inspection:** An inspection will be made of the work upon completion of all clearing, grubbing and excavation and all work incidental thereto. No fill shall have been placed at the time of this inspection.
2. **Second Inspection:** An inspection will be made of the completed drainage system (without backfill) as required on the Definitive Plan. At the same time, or such other time as the work may be available, an inspection will be made of the completed municipal services (without backfill) as required on the Definitive Plan. The inspection of the required municipal services will be made by the agency responsible for the particular service. Backfill of any portion of the drainage system or municipal services shall not be made until after receipt of notification of approval or acceptance by the Director of Public Works or his designee.

The inspection of the construction of the ways shall include the inspection of the backfilling and compaction of all utility trenches as may be installed by utility companies, and such work shall be performed in the manner as required by these Rules and Regulations. It shall be the applicant's responsibility to insure compliance with these requirements. If, in the opinion of the Planning Board, the backfilling and compaction of utility trenches and the patching of the pavement, if required, has not been performed in accordance with these Rules and Regulations, the Planning Board may not release the bond or Covenant applicable until such work has been performed to the satisfaction of the Planning Board.

3. **Third Inspection:** An inspection will be made of the compacted fill to bring the roadways to their proposed grades. No roadway foundation shall be installed until the compacted fill shall have been inspected and approved by the Director of Public Works or his designee.
4. **Fourth Inspection:** An inspection will be made of the first layer of compacted roadway foundation with sieve analysis. A gravel sample or samples may be taken at the discretion of the Director of Public Works or his designee. An inspection

will be made of the final layer of compacted roadway foundation. No pavement shall be installed until the compacted roadway foundation with results of compaction tests shall have been inspected and approved by the Director of Public Works or his designee.

5. **Fifth Inspection:** An inspection will be made of the Binder Courses (Class I Bituminous Concrete Pavement Type I-1 for the roadway surface) and again when the Finish Course of Class I Bituminous Concrete Pavement Type I-1 for roadway surface is put in place. All bituminous concrete must be inspected at the supplier's batching plant by a Certified (by Mass. Highway Dept.) Plant Inspector at the expense of the developer.
6. **Sixth Inspection:** An inspection will be made of all work as required on sidewalks, curbing, trees including street trees, landscaping, lighting, grass plots, side slopes, monuments, bounds and street signs.
7. **Seventh Inspection:** A final inspection will be made of all subsequent work as required herein or on the Definitive Plan to include the final clean-up. The results of all inspections will be recorded by the Director of Public Works or his designee, or in the case of those inspections which are the responsibility of other agencies by the responsible agent of such agency, on an Inspection Form which shall be kept on file in the office of the Director of Public Works until completion of the subdivision.

9.3 WATER AND SEWER LINE TESTING

Prior to acceptance by the Town, all water and sanitary sewer lines shall be tested to the satisfaction of the Director of Public Works. The results of each testing shall be conveyed, in writing, to the Planning Board and the Director of the Department of Public Works.

9.4 COMPLETION OF AS-BUILT PLANS

At the completion of construction, As-Built Plans, with a certification that all construction conforms to the As-Builts, must be submitted to the Planning Board and Department of Public Works. As-Built Plans must include all items described in Section 6.11.5 of these Regulations, and must be approved by the Department of Public Works prior to the return of subdivision surety. All submissions must include a completed checklist (use form available from Department of Public Works.)

9.5 DELAYS IN CONSTRUCTION

When any delay in completion of the construction of streets is anticipated in portions of a subdivision where houses are completed and occupied, the applicant may be required to construct certain portions of roads to the extent (at a minimum) of grading the sub-base, installing catch basin frames and manhole covers to a temporary grade, and placing the pavement bituminous concrete binder course to provide a temporary passable surface to the affected lots. All construction must conform to any time limits set by the Planning Board in their Conditions of Approval of the Definitive Plan. If delays are anticipated which would extend the time of construction beyond approved limits, prior approval of the Board must be obtained.

APPENDIX A. APPLICATION AND REVIEW FEES

SECTION 1. PURPOSE.

These regulations and fee schedules have been adopted to produce a more equitable schedule of fees which more accurately reflects the costs of technical and legal review of applications to the Planning Board; to take advantage of the procedures offered by G.L. c. 44, s. 53G; to establish a review procedure in the selection of consultants; and to promote more informed decision-making by the Planning Board.

SECTION 2. FEE STRUCTURES AND REGULATIONS.

2.1 General. The Planning Board shall impose reasonable fees for the review of applications which come before it. The Planning Board may impose Administrative Fees and Project Review Fees as may be applicable to the types of applications set forth below.

2.2 Form of Payment. All Administrative and Project Review Fees shall be paid by bank or certified check.

SECTION 3. ADMINISTRATIVE FEES.

3.1 Applicability. An Administrative Fee shall be assessed to offset the expense of review by the Planning Board and its office with regard to all applications set forth in Section 3.3, below.

3.2 Submittal. Administrative Fees shall be submitted at the time of the submittal of the application. Any application filed without this fee shall be deemed incomplete and no review work shall commence until the fee has been paid in full. All fees shall normally be collected and assessed by the Planning Board or its agent.

3.3 Schedule of Administrative Fees. The following schedule applies to the types of applications to the Planning Board set forth below. This schedule supersedes all previous schedules as they may have appeared in the Zoning By-Laws, the Rules and Regulations for the Subdivision of Land, and any listings which may have been compiled from time to time for the benefit of applicants.

- a. Approval Not Required (ANR) Plans - \$100.00.
- b. Preliminary Plans - \$500.00 and \$30.00 per lot.
- c. Definitive Plans - \$1000.00 and \$30.00 per lot or \$60.00 per lot if no preliminary plan was submitted.
- d. Modification of a Preliminary Plan - \$200.00 plus \$50.00 for each lot affected and for each new building lot created. In addition, a fee of \$50.00 shall be required for the modification of a drainage structure. The total fee required shall be the addition of all fees outlined above.

- e. Modification of a Definitive Plan - \$500.00 plus \$100.00 for each lot affected and for each new building lot created. In addition, a fee of \$100.00 shall be required for the consideration of a modification of a road and a fee of \$100.00 shall be required for the modification of a drainage structure. The total fee required shall be the addition of all fees outlined above.
- f. Lot Releases - \$200.00 per lot. In addition, where certain forms of surety require review by Town Counsel, the fee for this review shall be born by the applicant.
- g. Road inspections for reduction in surety - \$300.00 minimum, plus \$.50 per lineal foot of roadway to be inspected over 600'. This fee shall be charged separately for each inspection requested to be performed by the Town.
- h. Review of As-Built Plans - \$500.00 for each review requested to be performed by the Town.
- i. Special Permit - \$500.00. Modification or extension of special permit shall also require of a fee of \$500.00.
- j. Site Plan Administrative Review - Review of Site Plans shall require an application fee of \$350.00.
- k. Site Plan Waiver - Review of a Site Plan Waiver shall require an application fee of \$100.00.
- l. Repetitive Petition - Consideration of a petition for a rehearing by the Zoning Board of Appeals - \$300.00.

3.4 Fees for Revised Applications. Where an Administrative Fee has been calculated by the number of lots or units proposed, and the application is revised after payment of said fee, if the number of proposed lots or units increases, the applicant shall pay a fee equivalent to the difference between the fee originally paid and the fee that would have been paid had the original submission included these additional lots or units. No review of these additional lots or units shall take place until this additional fee is paid to the Planning Board office, and failure to make this payment after requesting additional lots shall be grounds for denial of the application.

3.5. Fee Waivers. The Planning Board may waive or reduce any Administrative Fee, if, in the opinion of the Board, unusual circumstances exist regarding the subject property or the applicant.

3.6 Refund. Once the review process has been commenced, the Planning Board shall not refund Administrative Fees, including the case of withdrawal of the application by the applicant.

SECTION 4. PROJECT REVIEW FEES.

4.1 Applicability. In addition to an Administrative Fee, the Planning Board shall impose a Project Review Fee on those applications which require, in the judgment of the Planning Board, review by outside consultants due to the size, scale or complexity of a proposed project, the project's potential impacts, or because the Town lacks the necessary expertise to perform the review work related to the permit or approval. In hiring outside consultants, the Board may engage engineers, planners, lawyers, designers, or other appropriate professionals able to assist the Board and to ensure compliance with all relevant laws, ordinances, by-laws and regulations. Such assistance may include, but shall not be limited to, analyzing an application, monitoring or inspecting a project or site for compliance with the Board's decisions or regulations, or inspecting a project during construction or implementation.

4.2 Submittal. Project Review Fees and Supplemental Project Review Fees shall be deposited in an account established pursuant to G.L. c. 44, s. 53G (53G Account).

4.3 Determination of Project Review Fees. Upon receipt of an application for Planning Board approval, Planning Board staff shall submit plans and/or other pertinent information to the consultant chosen by the Planning Board in order to obtain an estimate of the cost of consulting or review services. On receiving notification of the estimate, the applicant shall submit the amount indicated to the Planning Board. No review work shall commence until the estimated fee has been paid in full. Failure to submit the fee within five business days following notification shall be reason for denial of the plan for failure to comply with these regulations.

4.4 Inspection Phase. After the granting of a Special Permit, site plan approval or Definitive Plan approval, the Planning Board may require a Supplemental Project Review Fee for the purpose of ensuring the availability of funds during the inspection phase of the review process.

4.5 Handling of Project Review Fees. The Project Review Fee is to be deposited into a special account as set forth in G.L. c. 44, s. 53G.

- A. Outside consultants retained by the Planning Board to assist in the review of an application shall be paid from this account.
- B. Project Review Fees shall be turned over to the Town Treasurer by the Planning Board for deposit into a 53G Account.
- C. A copy of the latest statement from the banking institution handling the 53G Account shall be forwarded from the office of the Town Treasurer to the Planning Board office as soon as it is received for timely and accurate accounting.
- D. The Town Accountant shall prepare a report on activity in the 53G Account on an annual basis.

1. This report shall be submitted to the Selectmen for their review.
 2. This report shall be printed in the Annual Report for the Town.
- E.** An accounting of an applicant's funds held in the 53G Account may be requested by the applicant at any time.
1. The Planning Board shall respond to the request in a timely fashion.
 2. This accounting shall include the following information:
 - a. The latest statement from the banking institution handling the account, which should include an accurate accumulated interest portion to the closing date of the statement if such statements are subdivided into individual applicants' accounts. Otherwise, a statement of principal and interest, prepared by the Planning Board office, based on the latest statement from the banking institution.
 - b. A report of all checks authorized for issuance since the last banking statement.
- F.** An applicant may request an estimate of bills pending from consultants for work completed, or in progress, but not yet invoiced.
- G.** Excess fees in the 53G Account, including accumulated interest, shall be returned to the applicant or other person or agency responsible for making the original deposit at the conclusion of the review process, as defined below.
1. With the approval or disapproval of a Preliminary Subdivision Plan.
 2. With the disapproval of a Definitive Subdivision Plan.
 3. With the release of the performance bond at the end of construction of an approved Definitive Subdivision Plan.
 4. With the final inspection or the approval or disapproval on all other types of applications under the Zoning By-Law, whichever comes later.

4.6. Appeal. The choice of a consultant selected by the Planning Board for the review of an application may be appealed in writing to the Board of Selectmen by the applicant, providing such appeal is initiated within two weeks of the initial selection.

- A.** The Selectmen shall convene a formal hearing within twenty

days of receiving a written appeal by an applicant.

- B. Two circumstances may disqualify the selected consultant. These conditions of constitute the only grounds for an appeal.
 - 1. Conflict of interest: A consultant shall not have a financial interest in the project under review, or be in a position to financially benefit in some way from the outcome of the pending review process. Consultants must be in compliance with the Massachusetts Conflict of Interest Law, G.L. c. 268A.
 - 2. Lack of appropriate qualifications: A consultant shall possess the minimum required qualifications. The minimum qualifications shall consist of either an educational degree in, or related to, the field at issue or three or more years of practice in the field at issue or a related field.
- C. The required time limits for action upon an application by the Planning Board shall be extended by duration of the appeal.
- D. If no decision is rendered by the Board of Selectmen within one month following the filing of the appeal, the selection made by the Planning Board shall stand.
- E. This appeal shall not preclude further judicial review, if otherwise permitted by law, on the grounds provided for in this section.

SECTION 5. REVISION OF FEE SCHEDULES AND REGULATIONS GOVERNING FEES.

5.1 Amendment. The Planning Board may review and revise its regulations and fee schedules, from time to time, as it sees fit.

- A. Amendments shall be preceded by a public hearing.
- B. Any new regulations or alterations to the fee schedule shall take affect upon filing a copy of the amendments with the Town Clerk.
- C. The Planning Board will review its regulations and fee schedule on an annual basis.
 - 1. The Board may waive this provision in any year with a motion carried by a majority of the Board members.

APPENDIX B. CHARTS, DIAGRAMS AND TABLES

Table of Street Dimensions

	A	B	C	D	E
TYPE OF STREET	STREET (R.O.W.) WIDTH	ROADWAY WIDTH	CAPE COD BERM (Where required)	GRASS PLOT	SIDEWALK WIDTH
MINOR CAPE COD BERM TWO SIDES	42'	24'	3' (1 ½' per side)	4'	5'
CURB TWO SIDES	42'	26'	---	4 ½'	5'
SECONDARY CAPE COD BERM TWO SIDES	50'	27'	3' (1 ½' per side)	5'	5'
MAJOR STREET CURB TWO SIDES	50'	29'	---	5 ½'	5'
EXCEPT TYPE IV	55'	32'	---	6 ½'	5'
TYPE IV	60'	40'	---	5'	5'

Table of Hydrologic Soil Properties Classified by USDA Soil Texture

<i>Texture Class</i>	<i>Design Infiltration Rate (f) (Inches per Hour)</i>	<i>Hydrologic Soil Grouping</i>
Sand	8.27	A
Loamy Sand	2.41	A
Sandy Loam	1.02	B
Loam	.52	B
Silt Loam	.27	C
Sandy Clay Loam	.17	C
Clay Loam	.09	D**
Silty Clay Loam	.06	D**
Sandy Clay	.05	D**
Silty Clay	.04	D**
Clay	.02	D**

Overland Flow Chart

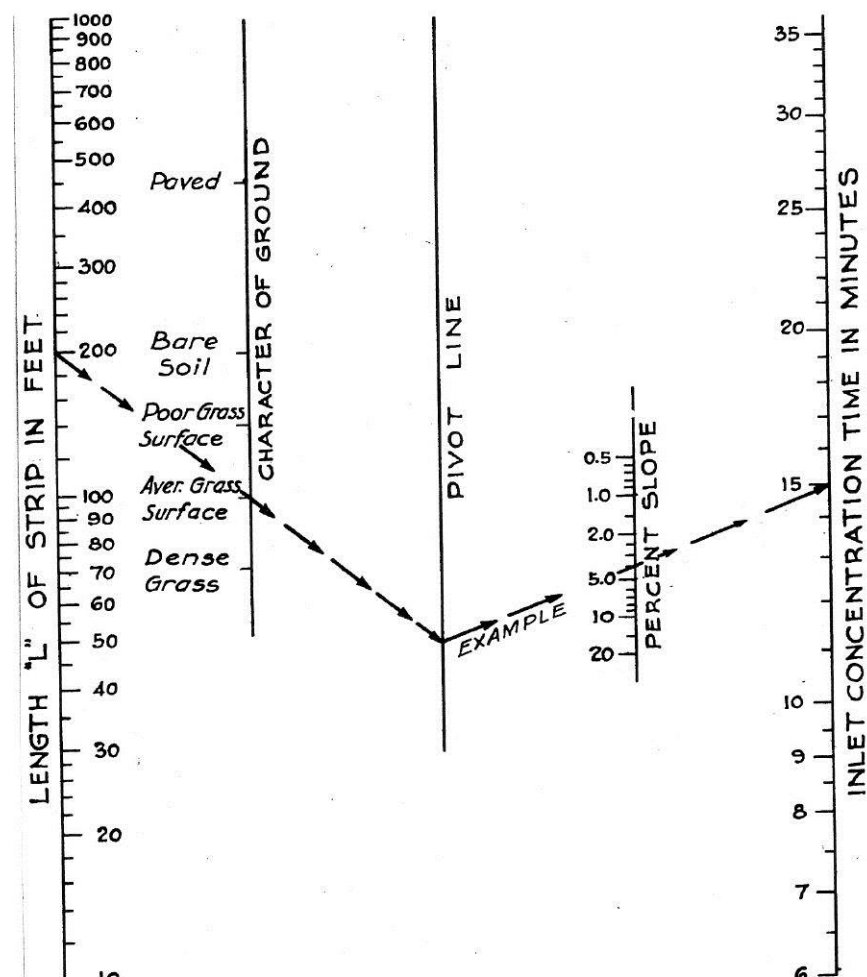


Table of Rainfall Intensity

FIGURE 2

