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**RULES & REGULATIONS GOVERNING
THE SUBDIVISION OF LAND IN
BOYLSTON, MASSACHUSETTS**

Adopted under the Subdivision Control Law, Section 81-K to 81-GG inclusive, Chapter 41, General Laws, and effective.

PURPOSE

(Section 81-M of Chapter 41, General Laws)

"The Subdivision Control Law has been enacted for the purpose of protecting the safety, convenience, and welfare of the inhabitants of the Town of Boylston in which it is, or may hereafter be, put into effect by regulating the laying out and construction of ways in subdivisions which are not public ways, and ensuring sanitary conditions in subdivisions, and in proper cases parks and open areas. The powers of a Planning Board and a Board of Appeals under the Subdivision Control Law shall be exercised with due regard for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel; for lessening congestion in such ways, and in the adjacent way public ways; for reducing danger to life and limb in the operation of motor vehicles; for securing safety in case of fire, flood, panic and other emergencies, for securing adequate provision for water, sewerage, drainage; underground utility services, fire, police, and other municipal equipment and street lighting, and other requirements where necessary in a subdivision; and with the public ways in the Town of Boylston, and with ways in neighboring subdivisions. It is the intent of the subdivision control law that any Subdivision Plan filed with the planning Board shall receive the approval of such Board if said Plan conforms to the recommendation of the Board of Health, all other Municipal agencies, and to reasonable Rules and Regulations of the Planning Board pertaining to the subdivision of land; provided, however, that said Board may, when appropriate, waive, as provided for in MGL Chapter 41, Section 81-R, such portions of the rules and regulations as is deemed advisable."

SECTION I - AUTHORITY

- 1.1.0 These rules and regulations shall be effective after approved and certified by the Register of Deeds and Recorder of Land Court. These regulations supersede all previous Subdivision Regulations of the Board.

SECTION II - DEFINITIONS

The word "shall" is always mandatory and not discretionary.

- 2.1.1 **Applicant** - A person (as hereinafter defined) who applies for the approval of a plan for a subdivision pursuant to these regulations. "Applicant" shall include an owner, or his agent or representative, or his assigns.
- 2.1.2 **Bench Mark** - A mark made in a permanent object of known location and elevation as a reference point. A benchmark may be those established by the U.S. Geological Survey, or those acceptable to the Planning Board or its Agent.
- 2.1.3 **Block** - An area of land bounded by a street, or by a combination of streets and public parks, cemeteries, railroad rights-of-way, exterior boundaries of a subdivision, shorelines of waterways, or corporate boundaries.
- 2.1.4 **Board** - The Planning Board of the Town of Boylston or its designated agent.
- 2.1.5 **Certified By** - Certified by (or endorsed by) the Planning Board, as applied to a Plan or other instrument required or authorized by the Subdivision Control Law to be recorded, shall mean, bearing a certification or endorsement signed by a majority of the members of the Planning Board, or by its Chairman or Clerk or any other person authorized by it to certify or endorse its approval or other action; and named in a written statement to the Register of Deeds and Recorder of the Land Court, signed by a majority of the Board. (Section 81-L of Chapter 41, MGL).
- 2.1.6 **Designer** - Professional Civil Engineer or Land Surveyor registered to practice in Massachusetts. All work defined as professional engineering or surveying shall be done under the direct supervision of a Registered Professional Engineer or Surveyor.
- 2.1.7 **Developer** - A person (as hereinafter defined) who develops a subdivision under a Plan of a subdivision approved pursuant to Section IV of these Rules and Regulations.
- 2.1.8 **Easement** - A right acquired by public authority or other person to use or control property for a utility, or other designated public purpose.
- 2.1.9 **General Laws** - (abbreviated MGL) The General Laws of Massachusetts, Tercentennial Edition. In case of a rearrangement of the General Laws, any citation of a particular section of the General Laws shall be applicable to the corresponding sections in the new modification.
- 2.1.10 **Lot** - An area of land in one (1) ownership with definite boundaries, used, or available for use, as the site of one (1) or more buildings. (Section 81- L of Chapter 41, MGL)
- 2.1.11 Low Impact Development – LID is an innovative approach to stormwater management in which an attempt is made to duplicate the hydrologic regime of an undeveloped watershed.***

This approach is implemented by engineering a site so that the post-development hydrologic functions remain close to pre-development conditions by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to its source.

- 2.1.12** Monument - A permanent marker of stone or concrete to indicate a property boundary, street sidelines of corners. See Section V, 5.2.0.
- 2.1.13** Municipal Services - Sewers, water drains, water pipes, gas pipes, electrical lines, telephone lines, similar systems, and their respective appurtenance.
- 2.1.14** Owner - As applies to real estate, the person holding the ultimate fee simple title to a parcel, tract, or lot of land.
- 2.1.15** Person - An individual, or two or more individuals, or a group or association of individuals, a Partnership, Trust or Corporation having common or undivided interests in a tract of land.
- 2.1.16** Planning Board Agent - Town employee or consultant authorized by the Planning Board to review subdivisions and/or administer the regulations.
- 2.1.17** *Practicable. Available and feasible considering cost, existing technology and logistics based on the overall purpose of the project.*
- 2.1.18** Preliminary Plan - A Plan of proposed subdivision, or a re-subdivision of land prepared in accordance with Section V to facilitate proper preparation of a Definitive Plan.
- 2.1.19** Plan, or Definitive Plan - The Plan of a subdivision as duly submitted (with appropriate application) to the Board for approval, to be recorded in the Registry of Deeds, or filed with the Land Court when approved by the Board, and such Plan when approved and recorded; all as distinguished from a Preliminary Plan.
- 2.1.20** Recorded - Recorded shall mean recorded in the Registry of Deeds of Worcester County, and when appropriate, shall include the Land Court. (Section 81-L of Chapter 41, MOL.)
- 2.1.21** Roadway - That portion of a way that is designed, and constructed for vehicular travel.
- 2.1.22** Standard Specifications - Commonwealth of Massachusetts, Department of Public Works Standard Specifications for Bridges & Highways, as amended.
- 2.1.23** Street Collector - A street, which in the opinion of the Board is being used, or will be used to mark a secondary road between local streets and the nearest major street (generally carrying between 241-1500 vehicles per day)¹.

¹ For purposes of determining street type the Planning Board shall calculate ten (10) trips per day for a single family (*deleted comma here*) or each unit in a duplex residence, and six (6) trips per day for each townhouse or unit in an apartment or multi-family structure.

- 2.1.24** Street; Local - A street, which in the opinion of the Board is being used, or will be used primarily to provide access to abutting lots, and which will not be used for through traffic (generally carrying less than 240 vehicles per day)¹.
- 2.1.25** Subdivision - The division of a tract of land into two (2) or more lots, and shall include re-subdivision and, when appropriate to the context, shall relate to the process of subdivision, or the land or territory subdivision; provided, however, that the division of a tract of land into two (2) or more lots shall not be deemed to constitute a subdivision within the meaning of the Subdivision Control Law if, at the time when it is made, every lot within the tract so divided has a frontage on (a) a public way, or a way which the Town Clerk of the Town of Boylston 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 Town, 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 land abutting thereon, or served thereby, and for the installation of municipal services to serve such land and the buildings erected, or to be erected thereon. Such frontage shall be at least such distance as is then required by the Zoning By-law. 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 (2) or more buildings were standing when the Subdivision Control Law went into effect in the Town into separate lots on each of which one (1) of such buildings remains standing, shall not constitute a subdivision. (Section 81-L of Chapter 41, MGL).
- 2.1.26** Subdivision Control - The power of regulating the subdivision of land granted by the Subdivision Control Law, MGL Chapter 41, Sections 81-A through GG inclusive, as hereinafter amended. (Section 81-L of Chapter 41, MGL.)
- 2.1.27** Town - The Town of Boylston.

SECTION III - PLAN BELIEVED NOT TO REQUIRE APPROVAL

3.1.0 Any person who wishes to cause to be recorded in the Registry of Deeds, or to be filed with the Land Court, a plan of land, and who believes that his plan does not require approval under the Subdivision Control Law, shall submit a Plan, and three (3) copies of this plan and application Form A (see Appendix) to the Board accompanied by the necessary evidence to show that the plan does not need approval. The size of the plat drawing shall not be less than twenty-four inches by thirty-six inches (24" x 36"). The Plan shall be at a scale of one inch equals forty feet (1" 40'), or such other scale as the Planning Board may accept to show details clearly and adequately. The plan shall contain the following information:

- a) bounds of the parcel to be divided and all new lots to be created;
- b) any existing structures on the land shown on the plan, and dimensions of all setbacks;
- c) any existing structures on any remaining adjoining land owned by the Applicant, and dimensions of all setbacks;
- d) remaining frontage of any adjoining land in the same ownership;
- e) present owner of the land shown on the plan, and all abutting owners; and
- f) location of any easement or way, public or private across the land, with a designation as to the use of the same.

If the Board determines that the plan does not require approval, it shall conduct a public meeting and within twenty-one (21) days of submission endorse on the plan the words "Planning Board Approval Under Subdivision Control Law Not Required". Failure to act within the stated time shall be deemed that approval under the Subdivision Control Law is not required. The Town Clerk shall issue a certificate of approval to the Applicant stating that approval under the Subdivision Control Law is not required. The plan shall be returned to the Applicant.

If the Board determines that the plan does require approval under the Subdivision Control Law, it shall, within twenty-one (21) days of submission of said plan, so inform the Applicant, and return the plan. *Only where vital and adequate access is reasonably guaranteed without the installation of a subdivision road is an applicant entitled to an endorsement of "approval not required", and only where such adequate and vital access is neither illusory nor nonexistent.*

SECTION IV - APPROVED PLAN REQUIRED - GENERAL PROVISIONS

4.1.0 No person shall make a subdivision within the meaning of the Subdivision Control Law of any land within the Town, or proceed with the improvement or sale of lots in a subdivision, or the construction of ways, or the installation of municipal services therein, unless, and until a Definitive Plan of such subdivision has been submitted to, and approved by the Board as herein after provided.

4.2.0 MORE THAN ONE DWELLING ON A LOT

Not more than one (1) building designed or available for use for dwelling purposes shall be erected or placed or converted to use as such on any lot in a subdivision, or elsewhere in the Town, without the consent of the Planning Board. Such consent may be conditional upon the providing of adequate ways furnishing access to each site for such building in the same manner as otherwise required for lots within a subdivision.

4.3.0 FISCAL IMPACT STATEMENT

At the discretion of the Board, a fiscal impact statement may be required for any subdivision exceeding five (5) lots. If required, The Board shall determine the scope for said report, which may include a narrative description of the project's impacts on municipal services and capital costs for infrastructure, education, recreation, and public safety.

4.4.0 ENVIRONMENTAL IMPACT STATEMENT

At the discretion of the Board, an environmental impact statement may be required for any subdivision exceeding five (5) lots. If required, the Board shall determine the scope for said report, which may include graphic and narrative descriptions of the proposed project's impacts on water and sewer; water bodies, streams, wetlands, ponds, lakes, wildlife habitat and other natural resources; aesthetics; traffic; and stormwater.

SECTION V-PROCEDURE FOR THE SUBMISSION & APPROVAL OF PLANS

5.1.0 PRELIMINARY PLAN

5.1.1 General

A Preliminary Plan of a subdivision may be submitted on Application Form B (see Appendix) along with three (3) copies by the subdivider for discussion and approval, modification, or disapproval by the Board. The submission of such Preliminary Plan will enable the subdivider, the Board and 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. When needed, the Board shall make such recommendations, and request such changes to the Preliminary Plan that shall be incorporated in the Definitive Plan for it to conform to the requirements of planning as applicable to the specific subdivisions.

5.1.2 Contents

The Preliminary Plan shall be drawn on sheets measuring twenty-four inches by thirty-six inches (24" x 36"). The subdivider shall prepare and submit two (2) copies for the Board, and one (1) copy to be filed with the Board of Health. The Plan shall be at a scale of one inch equals forty feet (1" = 40'), or such other scale as the Planning Board may accept to show details clearly and adequately. The Preliminary Plan shall include the following:

- a. subdivision name, north point, date and scale;
- b. name and address of record owner, subdivider, and surveyor;
- c. Worcester Registry of Deeds reference to land conveyance to owner; (book and page)
- d. names of all ~~abutters~~ *abutters* as determined from the most recent local tax list;
- e. lot lines with approximate distances;
- f. existing and proposed topography in two (2) foot intervals;
- g. location, names, and widths of existing and proposed streets, ways, easements, and public areas within the Plan;
- h. location of existing or proposed streets of record on abutting property which can practically be connected to streets within the proposed subdivision;
- i. the proposed system of drainage including site topography, adjacent existing natural waterways, sewers, water mains, culverts, and other underground structure within the tract, or adjacent thereto, and in a general manner, proposed water, sewer and other underground utilities;
- j. existing structures, driveways, and roads; natural resources; water bodies; significant trees; stone walls;
- k. proposed road profiles; ~~and~~
- l. approximate locations of septic systems; *and*
- m. a locus map of the general area of the subdivision.

5.1.3 Approval

The Preliminary Plan shall be studied in order to determine whether it is in compliance with the requirements as adopted by the Board. The Board shall convene an informal public hearing to review and consider the plan, and to obtain any public input regarding the plan.

Within sixty (60) days, the Board shall tentatively approve, disapprove, or approve with modifications the Preliminary Plan, noting thereon any changes that should be made. One (*1*) copy of the plan will be returned to the subdivider. Approval of the Preliminary Plan does not authorize issuance of building permits, or transfers of deeds within the subdivision.

5.2.0 DEFINITIVE PLAN

5.2.1 General

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

- a. An original drawing of the Definitive Plan, and five (5) contact prints thereof, dark line on white background. The original drawing shall be returned after approval or disapproval.
- b. A properly executed application Form C (See Appendix) including the time within which the subdivider or Applicant agrees to complete the ways and install the public utilities in the subdivision, and approval of all plans shall be upon the condition that all ways shown thereon and public utilities required by the Board shall be completed and installed within the time so specified. The Board may decline to approve any plan unless the Applicant agrees to complete the ways shown thereon, and install the *stormwater controls and* public utilities aforesaid within two (2) years of the date of his application. If the ways in any subdivision are not completed, and the utilities aforesaid are not installed within the time so agreed by the Applicant, or so required by the Board, no such way shall thereafter be laid out, constructed, completed, or opened for public use unless and until a new application is filed with, and approved by the Board. Ways, or portions thereof, not completed within the two (2) years from the date of the application shall thereafter be completed in accordance with the then in force design and construction standards of the Board. The Applicant shall file by delivery or Registered Mail a notice with the Town Clerk stating the date of submission for such approval, and accompanied by a copy of the completed application Form C (see Appendix).

5.2.2 Contents

The Definitive Plan shall be prepared by a Professional Engineer, and Land Surveyor registered in Massachusetts, and shall be clearly and legibly drawn in Black India Ink upon tracing cloth, or a media acceptable for recording at a Mass. Registry of Deeds. The Plan shall be at a scale of one inch equals forty feet (1" = 40'), or such other scale as the Planning Board may accept to show

details clearly and adequately. Sheet sizes shall not exceed twenty-four inches by thirty-six inches (24" x 36"). If multiple sheets are used, they shall be accompanied by an index sheet at a scale acceptable to the Planning Board showing the entire subdivision and adjacent streets with dimensions of the lots, and streets, and lot numbers. The Definitive Plan shall contain the following information:

- a. subdivision name, boundaries, bench mark, north point, date, scale, zoning classification, and title "Definitive Plan";
- b. names and addressees) of record owner, Applicant, subdivision, engineer, and surveyor;
- c. names and location of all ~~abutters~~ **abutters** as they appear in the most recent tax list;
- d. major features of the land, such as existing walls, fences, buildings, large trees, wooded areas, outcroppings, ditches, waterways, natural drainage courses, and wetlands that exist in or near the site at the time of survey;
- e. *in narrative form corresponding to the subdivision plan as submitted: site planning process shall be documented and shall include the following steps:*
 1. *Identify and map natural features (as described in Section 6.1.4 herein) and critical environmental resources;*
 2. *Delineate potential building envelopes avoiding natural features and environmental resource areas and appropriate buffers; and*
 3. *Develop methods to minimize impervious surfaces, and to protect and preserve open space.*
- f. lines of existing and proposed streets, ways, lots, easements, and public or common areas within the subdivision;
- g. sufficient data to determine location, direction, and length of every street and way line, lot line and boundary line, and to establish these lines on the ground. This shall include the lengths and bearings of the plat and boundary lines of all subdivision lot lines including lot frontage on the streets, of the boundary lines of all streets and easements, and the length, radii, tangents, and central angles of all curves in lot lines, street lines and easements. All angle points, or intersection of tangents along the street lines shall be shown. Areas of lots with lot numbers, and areas of other adjoining land of the Applicant not included in the subdivision will be shown;
- h. location of all permanent monuments properly identified as to whether existing or proposed;
- i. location, general direction, names and present widths of streets or ways bounding, approaching, or within reasonable proximity of the subdivision, showing both roadway widths, and right-of-way widths;
- j. indication of all easements, covenants, or restrictions applying to the land and their purposes, whether or not within the subdivision;
- k. if the property that comprises the subdivision, or any part or boundary thereof has been examined, approved, and confirmed by the Massachusetts Land Court, such information shall be noted on the plan with the case numbers, and other pertinent reference to Land Court Procedure, and the same requirements shall apply to any adjoining parcels of land;
- l. suitable space to record the action of the Board, and the signatures of the members of the Board, (or officially authorized person).
- m. existing profiles on the exterior lines, and proposed profile on the centerline of proposed streets at a horizontal scale of one inch equals forty feet (1" = 40'), and a vertical scale of one inch equals four

feet (1" 4'), or such other scales acceptable to the Board. At least two (2) benchmarks are to be shown on plans and profiles, and grade elevation at every fifty-foot (50') station, except on vertical curves, which shall be at every twenty-five foot (25') station. All existing and proposed intersections shall be shown with all proposed grade elevations calculated. Elevations are to be referred to either U.S.O.S. Datum, or to such other datum acceptable to the Board. Gradient shall be shown by figures expressed in percent (%);

- n.* existing and proposed topography at two foot (2') contour intervals, or such other intervals required by the Board;
- o.* size and location of existing and proposed water supply mains, and their appurtenances, hydrants, sewer pipes and their appurtenances, and/or sewerage disposal systems including date on borings and percolation tests made (and date), *stormwater best management practices (BMPs)*, storm drains and their appurtenances (*deleted comma here*) and easements relative thereto, dimensions of gutters, and method of carrying. water to the nearest water course, or easements for drainage as needed, whether or not within the subdivision. If the surface water drains will discharge into adjacent existing streets, or onto adjacent properties not owned by the petitioner or subdivider, the latter shall clearly indicate what course the discharge will take, and shall present to the Board evidence from the Planning Board Agent, or the owner of adjacent property that such discharge is permitted by public or private ownership of adjacent street or property;
- p.* location and species of proposed street trees, and trees to be retained with trunks over three inches (3") in diameter measured six inches (6") above finished ground level, located within twenty feet (20') of the street right-of-way line of existing or proposed streets. Location of, and identification of areas where trees are to be removed in the course of site preparation, construction, or landscaping;
- q.* calculations prepared by a Registered Engineer to substantiate proposed drainpipe sizes. In the computations a rainfall of two inches (2.00") per hour on a one hundred (100) year frequency basis shall be used. Drainpipes crossing a proposed or existing public way shall be sized to withstand the flow from a one hundred (100) year storm.
- r.* location of proposed street lights and sidewalks;
- s.* cross section typical of each street or roadway to be constructed; ~~and~~
- t.* in tabular form for the subdivision plan as submitted: the area which is being subdivided; the total area of lots; the areas dedicated or to be used for street purposes; and the areas reserved for parks, schools, open space;
- u.* location of all proposed septic systems; *and*
- v.* a locus map of the general area of the subdivision.

5.2.3 Review by Board of Health as to Suitability of Land

At the time of filing of the Definitive Plan, the subdivider shall also file with the Board of Health one (1) contact print of the Definitive Plan, dark line on white back background. The Board of Health shall within forty-five (45) days after filing of the plan, report to the ~~Board~~ *Applicant* in writing approval or disapproval of said plan. If the Board of Health disapproves said plan, it shall make specific findings as to which, if any of the lots shown on such plan cannot be used for building sites without injury to the public health, and include such specific findings, and the reasons therefore in such report, and where possible, shall make recommendations for the adjustment

thereof. Every lot shall be provided with a sewerage system satisfactory to the Board of Health

before a building on it is occupied.

5.2.4 Approval under MGL Chapter 131, Section 40 Wetlands Protection Act

Any person submitting a plan for approval by the Board, that will alter a resource area pursuant to the Wetlands Protection Act (MGL Chapter 131 Section 40) shall file A Notice of Intent with the Boylston Conservation Commission. An Order of Conditions shall be obtained prior to the commencement of any development work.

5.2.5 Plan Review by Local Entities

Before the Definitive Plan is approved, the Board shall obtain written statements from the following officials that the proposed improvements are laid out to their satisfaction in the following respects. If thirty-five (35) days have elapsed since the transmittal of the Definitive Plan by the Planning Board Clerk to the officials without such written approval, Constructive approval shall be granted.

- a. The Selectmen and Town Counsel as to street names, form of easements and covenants, and performance guarantees;
- b. The Highway Superintendent as to the design of the street system, location of easements, monuments, street lights, drainage system and its appurtenances;
- c. The Boylston or Morningdale Water District as to the construction of water mains and connections.
- d. The Fire Chief as to the availability of water and adequacy of water pressure for fire protection in conformance with the standards of the National Fire Protection Association.
- e. The Light Department as to compliance with its regulations regarding design and easement issues.
- f. The Selectmen whenever Town property is to be altered by drainage and/or construction.
- g. *The Conservation Commission as to compliance with the Boylston Stormwater Control Bylaw and Wetlands Protection Act.*

5.2.6 Soil Survey

Where appropriate, the Board may require soil surveys, and/or percolation tests and deep hole tests to establish the suitability of the land for the proposed storm and sanitary drainage installations.

5.2.7 Earth Removal Permit

The Applicant shall obtain a permit from the Boylston Earth Removal Board as provided by the Boylston Earth Removal By-law, prior to the start of any development work.

5.2.8 ~~Sediment & Erosion Control Permit~~ Stormwater Control Permit

The Applicant shall *prepare and Erosion & Sediment Control Plan, Stormwater Management Plan, and an Operation and Maintenance Plan and* obtain a *Stormwater Control* permit from the Boylston Conservation Commission as provided by the Boylston ~~Sediment & Erosion~~ *Stormwater* Control By-law, prior to the start of any development work.

5.2.9 Public Hearing

Before approval of the Definitive Plan is granted, a public hearing shall be held by the Board. Notice of such hearing shall be given by the Planning Board at least fourteen (14) days prior thereto by advertisement in an official publication of, or in a newspaper of general circulation in the Town of Boylston. A copy of said notice shall be mailed by the Applicant at his own expense by Certified Mail Return Receipt Requested to all owners (as appearing in the most recent tax list) of land abutting upon the subdivision, or lying within one hundred feet (100') of any tract of land of the Applicant, any part of which is included in the proposed subdivision. The Board may, as a condition of granting a permit under MOL Chapter 41, Section 81- Y, impose reasonable requirements designed to promote health, convenience, safety, and general welfare of the community, and to benefit the Town. In such event, the Board shall endorse such conditions on the plan to which they relate, or set forth a separate instrument attached thereto, which reference is made on such plan, and which shall be for the purpose of the Subdivision Control Law be deemed to be a part of the plan.

5.2.10 Performance Guarantee

Before endorsement of the Board's approval of a Definitive Plan of a subdivision, the subdivider shall agree to complete the required improvements specified in Sections VI and VII for any lots in a subdivision, such construction and installation to be secured by one, or in part by one, and in part by the other of the following methods which from time to time may be varied by the applicant with the written consent of the Planning Board:

- a. by a proper bond, sufficient in the opinion of the Board to secure performance of the construction of ways, and the installation of municipal services required for lots in the subdivision shown on the Plan, and the Board may require that the Applicant specify the time within which such construction shall be completed.
- b. by a deposit of money or negotiable securities, sufficient in the opinion of the Board to secure performance of the construction of ways, and the installation of municipal services required for lots in the subdivision shown on the Plan, and the Board may require that the Applicant specify the time within which such construction shall be completed.
- c. by a covenant, executed and duly recorded by the owner of record, running with the land, whereby such ways and services shall be provided to serve any lot before such lot may be built upon, or conveyed, other than by mortgage deed; provided that a mortgagee who acquired title to the mortgaged premises by foreclosure or otherwise, and any succeeding owner of such premises or part thereof may sell any such lot, subject to that portion of the covenant which provided that no lot shall be built upon until such ways and services have been provided to serve such lot; and provided, further, that nothing herein shall be deemed to prohibit a conveyance by a single deed, subject to such covenant, of either the entire parcel of land shown on the subdivision plan, or all lots not previously released by the Board. A deed of any part of the subdivision in violation hereof shall be voidable by the grantee prior to the release of the covenant, but not later than three years from the date of such deed.
- d. by delivery to the Board of an agreement executed after the recording of a first mortgage

covering the premises shown on the plan, or a portion thereof given as security for advances to be made to the Applicant by the lender, which agreement, shall be executed by the Applicant and the lender, and shall provide for the retention by the lender of funds sufficient in the opinion of the Board and otherwise due the Applicant, to secure the construction of ways, and the installation of municipal services. Said agreement shall also provide for a schedule of disbursements which may be made to the Applicant upon completion of various stages of the work, and shall further provide that in the event the work is not completed within the time set forth by the Applicant, any funds remaining undisbursed shall be available for completion.

5.2.11 Reduction of Surety Bond
5.2.11 Reduction of Surety Bond

The penal sum of any such bond held under clause (a), or any deposit held under clause (b), or any amount of funds retained pursuant to an agreement under clause (d) shall bear a direct and reasonable relationship to the expected cost including the effects of inflation, necessary to complete the subject work. Such amount or amounts shall from time to time be reduced so that the amount bonded, deposited or retained continues to reflect the actual expected cost of work remaining to be completed.

5.2.12 Release of Performance Guarantee

Upon the completion of improvements required under Sections VI and VII, security for performance of which was given in accordance with Section 5.2.10, clauses (a), (b), (c), or (d), the Applicant may send by Registered Mail to the Town Clerk a written statement in duplicate that the said construction or installation in connection with which such bond, deposit, or covenant has been given has been completed in accordance with the requirements contained under Sections VI and VII, such statements to contain the address of the Applicant, and the Town Clerk shall forthwith furnish a copy of said statement to the Planning Board. If the Planning Board or its agent, after its final inspection, determines that said construction or installation has been completed, it shall notify the Town Treasurer in writing that it releases the interest of the Town in such bond or deposit; and that such bond or deposit shall be returned to the person or persons who furnished same; or in the case of covenant suitable for recording. However, ten percent (100/0) of the value of the bond shall be held by the Town for one (1) year after the completion of construction, or until the streets are accepted by the Town, whichever comes first. Prior to releasing the Town's interest in accordance with Section 5.2.10, clauses (a), (b), (c) or (d), the Planning Board shall receive from the Applicant the following written statements of approval, or fifteen (15) days shall elapse after the request for said approval without action:

- 1) from the Planning Board Agent as to construction of all ways and sidewalks, installation of monuments, street signs, lights, gutters, curbs, required grading and drainage, planting and seeding;
- 2) from the Board of Health as to the installation of sewage disposal facilities, and
- 3) from the water supplier as to the installation of water facilities.
- 4) *from the Conservation Commission as to the installation of erosion & sediment control*

measures and post-construction stormwater management practices and as to providing for adequate operation and maintenance of stormwater BMPs in perpetuity. This written statement shall not be required if the Conservation Commission has collected a separate performance bond as a condition to approving the applicant's Stormwater Control Permit.

If the Planning Board determines that said construction or installation has not been completed, it shall specify to the Applicant, in writing by Registered Mail, the details wherein said construction and installation fail to comply with requirements contained under Section VI and VII. Upon failure of the Planning Board to act on such application within sixty (60) days after receipt of the application by the Town Clerk, all obligations under the bond shall cease and terminate by operation of law, any deposit shall be returned, and any such covenant shall become void.

In the event that said sixty (60) day period expires without such specification or without release and 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

5.2.13 Certification of Approval

The action of the Planning Board in respect to such plan will be by vote, copies of which shall be certified, and filed with the Town Clerk, and sent by delivery or 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 the rules, regulations, and recommendations of the Planning Board. Final approval, if granted, shall be subject to the design and construction specifications contained herein, and shall be endorsed on the original drawing of the Definitive Plan by the signatures of a majority of the Planning Board (or the signature of the person officially authorized by the Planning Board), but not until the statutory twenty (20) day appeal period has elapsed following the filing of the certificate of the action of the Planning Board with the Town Clerk, and said Clerk has notified the Planning Board that no appeal has been filed. After the Definitive Plan has been approved and endorsed, the Planning Board shall return the original to the Applicant. The Planning Board may extend the sixty (60) day period permitted by statute between submission of a Definitive Plan and action thereon upon written request of the Applicant.

NOTE: Approval of the Definitive Plan does not constitute the laying out, or acceptance by the Town of streets within a subdivision.

SECTION VI - DESIGN AND CONSTRUCTION STANDARDS

6.1.0 GENERAL

6.1.1 Basic Requirements

The subdivider shall observe all design standards, and as a general guideline, shall explore all methods and means to *implement low impact development and* maintain as much of the natural topography, drainage, and vegetation as possible so that disruption of these natural features and characteristics is kept to an absolute minimum. The Planning Board may require in instances relating to the proceeding, that the subdivider obtain the services of a Registered Landscape Architect. These standards shall be considered as minimum, and may be waived or modified to result in improved subdivision design, preserve and enhance the natural features or ultimately reduce street maintenance costs, and other similar costs usually associated with streets once duly accepted by the Town.

6.1.2 Conformance with Master Plan

To the extent that it is possible and practical, any proposed subdivision, and proposed streets therein shall conform to the basic intent of the Boylston Master Plan as adopted in whole or in part by the Planning Board and as it may be amended, unless substitute proposals may be shown to the satisfaction of the Board to serve better the general area of the subdivision and the Town.

6.1.3 Lot Sizes and Frontage

All lots shall be of such size and dimensions to meet the minimum requirements of the Boylston Zoning By-Laws.

6.1.4 Preservation of Natural Features

Due regard shall be shown for all natural features, such as large trees, water courses, scenic areas, historic sites, and similar community assets, which, if preserved will add attractiveness and value to the subdivision.

6.1.5 Access Through Another Municipality

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

6.2.0 STREETS

6.2.1 Location

- a.* All streets in the subdivision shall be designed so that in the opinion of the Planning Board, they will provide safe vehicular traffic, and attractive street layout in order to obtain the maximum safety and amenity for future residents of the subdivision.
- b.* ***Local street shall be designed using the minimum required pavement needed to support travel lanes, on street parking, and emergency, maintenance, and service vehicle access.***
- c.* All lots within a subdivision shall be accessed from proposed streets of the subdivision.
- d.* The proposed streets shall conform, as far as practicable, to any existing plans of the Planning Board, and when adopted by the Planning Board, to the Master Plan, or parts thereof adopted.
- e.* Provision satisfactory to the Planning Board shall be made for the proper projection of streets, or for access to adjoining property, which is not yet subdivided.
- f.* 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. If a subdivision is adjacent to a tract of land capable of subdivision, such parcels and streets shall be arranged so as to allow the logical and economical extension of streets, utility easements, drainage ways, and public areas into such parcels and adjacent tracts, and a driveway apron and a right-of-way easement shall be provided.
- g.* Proposed street names shall not duplicate nor bear phonetic resemblance to the name of existing public ways, paper
- h.* street, or any other way qualified to provide frontage under M.G.L. c. 41, § SIL. A proposed street that is in alignment with an existing street shall bear the same name as the existing street.
- i.* Street signs shall be provided at each intersection.
- j.* Street names shall be approved by the Planning Board to prevent duplication, and to provide names in keeping with the character of the Town.

6.2.2 Alignment

- a.* The Reference Standard shall be the Geometric Design of Highways and Streets by the American Association of State Highways and Transportation Officials (AASHTO), latest edition, as amended.
- b.* Street jogs with centerline offsets of less than one hundred and fifty feet (150') shall be avoided whenever possible.
- c.* The minimum centerline radii of curved streets shall be as follows: local streets - one hundred feet (100')
- d.* collector streets - two hundred fifty feet (250')
- e.* A tangent at least one hundred and fifty feet (150') in length shall separate all reverse curves on major streets except where at least one (1) radius is five hundred feet (500').
- f.* Property lines at street intersections shall be laid out so as to intersect at intervals which will permit block size to be in a range of six hundred feet to twelve hundred feet (600'-1200') in length, unless otherwise specified by the Planning Board. In lieu of actual construction of a cross street, in special instances the Planning Board may approve an easement for a future street.

- g. Streets shall be laid out so as to intersect as nearly as possible at right angles. No street shall intersect any other street at less than sixty degrees (60°).
- h. Intersections must be located to provide sufficient sight distance for drivers. The minimum corner sight distance at intersections measured over the existing paved or traveled way shall be (stop controls are assumed):

<u>DESIGN SPEED</u>	INTERSECTION SIGHT <u>DISTANCE</u>
20	200
30	300
40	400
50	500

The Board may require alternative sight distance standards if topographic, average actual speed on the road, or other site features warrant modification of the distances listed above.

6.2.3 Access from Public Ways

- a. All streets and/or common driveways in a subdivision wholly or partially within the Town of Boylston must be able to be reached directly (without leaving the Town of Boylston) from a public way or ways in the Town of Boylston.
- b. Should it be deemed necessary, the Planning Board may require the Applicant to provide a traffic report to the Board, prepared by a traffic engineer who is licensed in the Commonwealth of Massachusetts. The cost of same is to be solely born by the Applicant.
- c. Where the street system within the proposed subdivision does not intersect with or have, in the opinion of the Planning Board, adequate access from an existing public way, the Board may require, as a condition of approval, that such adequate access be provided by the Applicant, and/or that the Applicant make physical improvements to and within such existing or proposed way of access in accord with the design and construction requirements of these Rules and Regulations, from an appropriate street within a subdivision to the nearest public way most suitable in terms of width, grade and construction.
- d. Where the physical condition or width of a public way from which a subdivision has its access is considered by the Board to be inadequate to carry the traffic expected to be generated by such subdivision, the Board may require the Applicant to dedicate a strip of land for the purpose of widening the abutting public way to a width a least commensurate with that required within the subdivision, and to make physical improvements to and within such public way to the same standards required within the subdivision. Any such dedication of land for purpose of way and any such work performed within such public way shall be made only with permission of the governmental agency having jurisdiction over such way, and all costs of any such widening or construction shall be borne by the Applicant.

6.2.4 Width

- a. The minimum width of any street right-of-ways, including dead-end streets, shall be fifty feet (50')
- b. The minimum width of pavement in all proposed streets shall be:

local street – ~~twenty-four~~ *twenty* feet (~~28'~~) (*20'*)

collector street – ~~twenty-eight~~ *four feet* (~~28'~~) (*24'*)

6.2.5 Grade

- a. The centerline grade for any street shall not be less than three quarters of one percent (.75%).
- b. Where changes in grade exceed one percent (1%), vertical curves at least one hundred feet (100') in length shall be provided. Longer vertical curves may be required to afford adequate sight distances. On a street in any district where a grade is four percent (4%) or greater within two hundred feet (200') of the intersection of street right-of-way lines, a leveling area shall be provided of at least seventy-five feet (75') with a maximum grade of two percent (2%).
- c. Roadways shall have a cross slope at two percent (2%).
- d. Where curves and grades combine to create potentially dangerous driving conditions, the Board may require a suitable amount of super elevation of the curves or other protection.
- e. Roadways shall be designed to fit existing topography as much as possible so as to minimize the amount of cut and fill necessary within the street R.O.W.

6.2.6 Dead-End Streets

- a. Dead-end streets shall be defined as a way that does not connect to another existing public way at its end. This shall include, but not be limited to, ways, which are impassible due to the topography, wetlands, or other conditions and shall include so called "paper streets", which have not been improved.
- b. Dead-end streets shall be approved only in situations where connecting roads are not possible due to conditions such as topography and wetlands in order to maintain rural character and the capacity of major roadways for a larger population base. A deadend street, whether temporary or permanent, shall not serve more than six (6) lots nor have a pavement centerline length longer than five hundred (500) feet from the edge of pavement of the intersecting street to the dead-end street's most distant point unless, in the opinion of the Board, a greater length is necessitated by topography or other local conditions. A dead-end street shall not access from an existing way that is a dead-end street unless the total number of lots on the existing way and the proposed subdivision road does not exceed a total of six (6) lots, excluding lots divided in accordance with MGL Chapter 41, Section 81P, (ANR).
- c. Dead-end streets shall be provided at the closed end with a turnaround having an outside street line diameter of at least one hundred and thirty-five (135) feet, a radius at the outer edge of traveled way of fifty-seven (57) feet and a landscaped island in the center with a diameter of fifty-eight (58) feet. The natural vegetation shall be maintained where possible; in areas that cannot retain the natural vegetation, a landscaping plan shall be provided for the cul-de-sac island.

Where site conditions are favorable, cul-de-sac islands shall be designed to treat and infiltrate runoff through bioretention. The paved area should be pitched allowing the

stormwater runoff to flow into the center bioretention area for treatment and infiltration. The center bioretention area shall be depressed to allow the collection and infiltration of surface runoff. In slowly permeable soils (less than 0.3 inches/hour) a perforated underdrain may be installed at the bottom of the excavation to prevent ponding.

- d. A dead-end street shall not have a pavement centerline grade of greater than two percent (2%) for the last one hundred (100) feet at the closed end.
- e. Temporary dead-ends shall similarly provide for a turnaround, which may be located in part on easements over lots so long as contractual assurance is provided that upon extension of the street, the terminated turnaround will be removed and replaced with loam and appropriate planting. The new Applicant shall remove the temporary turnaround upon placement of the binder course on the road extension. Provisions shall be made so that when a temporary dead-end street is extended, land in the cul-de-sac beyond the normal right-of-way width shall be deeded to the owners of the abutting lots.

6.2.7 Curbs and Gutters *or Vegetated Open Channels*

- a. Unless otherwise specified by the Planning Board, curbs and gutters shall be provided at intersections along the roadway, the distance of the arcs of the curves plus a straight section at each end of the eight feet (8') along each edge of a roadway where the roadway ~~the~~ grade exceeds five percent (5%), and on the inner side of all curves with a radius of less than two hundred and fifty feet (250'). Installation of curbs, gutters, or integral rolled curb and gutter shall be in accordance with the specifications of the Planning Board or its Agent.

Provisions may be made to construct vegetated open channels in lieu of traditional curbs and gutters, where, in the opinion of the Planning Board, it is appropriate and reasonable. Vegetated open channels may consist of grass channels or dry swales. Grass channels are most appropriate for smaller drainage areas, mildly sloping topography, and housing density less than 4 dwelling units per acre. Dry swales are most appropriate for high density areas.

~~Provisions can be made to construct gutters made of natural materials, where, in the opinion of the Planning Board it is appropriate and reasonable.~~ The Board reserves the right to specify appropriate material for construction of curbs and gutters *or vegetated open channels*.

- b. Unless otherwise specified by the Planning Board, gutters *or vegetated open channels* shall be provided along each edge of the roadway where the grade exceeds three percent (3%), but is less than five percent (5%).
- c. Driveways shall be at least nine feet (9') *(deleted comma here)* wide, and have a curb return at the roadway of three feet (3') in radius.
- d. Where *no vegetated open channels* ~~rolled curbs~~, or ~~no~~ curbs exist, the driveway flare should have a three foot (3') radius. Driveway cuts shall not be within fifty-five feet (55') of the intersection of the centerline of the intersecting streets.

6.2.8 Subdrains

- a. In areas where the finished grade of the roadway is less than four (4) feet above the water table or in areas where less than four (4) feet of fill is placed above the water in swampy places or

any standing water, or in other areas, where in the opinion of the Board the subgrade must be drained, a system of sub drains shall be designed for such areas.

- b. The subdrains shall be 6-inch perforated SDR 35 PVC, SCH 40 PVC, or HDPE pipe, bedded in crushed stone, of 1/2-inch to 3/4-inch gradation, in a two (2)-foot wide drain trench filled with such crushed stone. Crushed stone shall be wrapped in a synthetic, non-woven geotextile fabric, with geotextile opening size of 0.21 mm or as appropriate for the soil type. Subdrains shall be 48 inches below finish grade as measured at the invert of the pipe, and shall be located outside the edge of the pavement (but within the right of way) on both sides of the road.
- c. The system of subdrains shall be discharged into the storm drainage system or otherwise disposed of in a manner satisfactorily to the Board. Cleanouts shall be located every 150 feet along the run of the subdrains All cleanouts shall be raised to finish grade with a road box or cap.

6.2.9 Sidewalks, Bikeways, and Walkways

- a. Sidewalks within the street right-of-way shall be provided as follows unless otherwise approved by the Board:

Industrial	One side
Collector Street (25+ Homes)	Each side
Local Street (7-24 Homes)	Each side
Dead-end Street (1-6 Homes)	One side

- b. Where sidewalks are required on each side of the street, they shall extend the full length of the street and completely around the turnarounds. Where sidewalks are required on one side only, the side shall be as determined by the Board. It shall extend the full length of the roadway and on streets terminating in a turnaround, the sidewalk shall terminate with a ramp out to the pavement, at the farthest end of the curbing at the turnaround, unless it is otherwise required to be extended to connect with an off-street walkway. In addition, public off-street walkways or bikeways may be required by the Board to provide circulation or access to schools, playgrounds, parks, shopping, transportation, open space or community facilities, or for such other reason as the Board may determine. The Board may require Applicants to propose ways to create connections with a proposed subdivision and adjacent existing developments. Such ways shall not be part of any lot in the subdivision and shall have a minimum permanent twenty-foot (20') easement. The Board may authorize substitution of a bikeway for one sidewalk where two sidewalks are required.
- c. Alignment - Sidewalks shall be separated from the traveled way by a planting area of varying width but at no place (except intersections) to be less than four feet (4'). Sidewalks shall meander as necessary to accommodate and protect existing topography, trees, ledge, and other site features. Off-street walkways and bikeways shall have minimum centerline radius of twenty-five (25') feet and maximum gradient of five percent (5%). Sidewalks, ramps, and leveling areas shall be designed in accordance with the American Disabilities Act (ADA) Regulations. Leveling areas at intersections with sidewalks shall be shown on the plans and

details. The planting area between the sidewalk and the street pavement shall be planted with a minimum of six inches (6") of loam and seed.

- d. Width - All sidewalks shall have a minimum pavement width of four feet (4'). Offstreet walkways and bikeways shall be located in permanent easements with minimum width of twenty feet (20'). Poles and hydrants shall not restrict this width at any point.
- e. Construction
 - 1. *Permeable Sidewalk – To the maximum extent practicable, permeable paving (porous asphalt or pervious concrete) shall be used for sidewalks, provided the appropriate soil and slope conditions exist. Permeable paving shall be constructed as described in Section 7.6.0.*
 - 2. *Impervious Sidewalk* -All materials shall be removed for the full width of the sidewalk to sub grade eleven inches (11 ") below the finished grade as shown on the cross section. Bituminous concrete shall be laid (without using forms) in two (2) courses, each at one and a half inches (1 1/2"), shall have a minimum thickness of three inches (3 ") after compression, and shall be constructed on an eight inch (8") well graded gravel (Mass Highway M1.03.0 Type b) foundation to the required lines and grades in accordance with the Standard Specifications.
 - 3. If the Applicant desires to install cement concrete sidewalks, they shall be constructed as approved and directed by the Board in conformity with the Standard Specifications.

6.3.0 GRASS PLOTS

- a. A grass plot shall be provided on each side of each roadway between the pavement and sidewalk areas, and shall occupy all the remaining area between the pavement and sidewalk areas. All areas within the right-of-way that are not paved shall be loamed and seeded for grass.

The slope of the grass plot shall be as shown on the profiles and standard crosssections, and preparation and seeding of the plots shall be in accordance with Section 765 of the Standard Specification. *When a sidewalk is constructed of permeable pavement, as approved by the Planning Board, runoff shall be directed away from the sidewalk.*

Areas to be planted in grass shall have loam placed to a compacted depth of (6"). The grass seed shall be creeping red fescue and perennial rye grass and shall otherwise conform to the Standard Specifications. All the material slips for the loam and seed must be submitted and approved by the Board prior to spreading of any material. Seed shall be placed at the rate of four (4) pounds per one thousand (1,000) square feet and shall be properly fertilized and watered with uniform coverage to keep the seeded areas moist. After frost has ended, seeded areas shall be watered regularly to a minimum depth of two inches (2") until the performance guarantee is released.

Surety, adequate in the opinion of the Board, will be held to cover the costs of healthy grass growth.

- b. Utility poles and street lights shall be located in the grass plot, but shall not be nearer than twenty-five feet (25') measured from the intersection of the side line tangents of the intersecting streets.

6.4.0 TREES

To the maximum extent practicable, native trees and shrubs shall be conserved during the development process. If tree planting is necessary it shall conform to the following guidelines:

- a. Trees are to be planted where necessary, as determined by the Board, to assure amenity for the subdivision and provide shade and canopy cover for the subdivision road. Trees shall be the equivalent of well-rooted nursery-grown, stock free of injury, harmful insects, and diseases. They shall be well-branched, and the branching structure shall be sound. Trees shall only be planted after April 15 and before September 30.
- b. No more than fifty percent (50%) of the trees, approved to be planted, shall be of any one species and no less than twenty-five percent (25%) of the total trees planted shall be of anyone species. Trees shall be of the following species, unless an alternative is specifically approved by the Board:
 - Acer saccharum (Sugar Maple)
 - Fraxinus americana(White Ash)
 - Fraxinus pennsylvanica (Green Ash)
 - Ginko biloba (Gingko - male only)
 - Gleditsia triacanthos (Honey locust)
 - Platanus acerifolia (London Plane Tree)
 - Quercus palustris (Pin Oak)
 - Quercus rubra (Red Oak)
 - Red Spine Pear
 - Tilia cordata (LittleleafLinden) Zelkova
 - seviata (Japanese Zelkova)
- c. Trees shall be spaced at intervals of fifty-five to sixty-five feet (55'-65'). No trees shall be planted within fifty feet (50') of an intersection or future intersection. Trees on one side of the street may be set either opposite or diagonally to trees on the opposite side. Trees shall be planted two and a half feet (2 1/2') behind the sidewalk or six feet (6') behind the gutter line and always within the R.O.W. No trees shall be planted in any easements. A minimum of one (1) tree shall be planted in the center of the cul-de-sac. The location of all the proposed trees must be reviewed by the Board on-site and approved prior to installation.
- d. Minimum acceptable size of tree to be planted shall be a three inch (3 ") trunk caliper at six inches (6") above the ground. At the time of delivery the proposed trees must be approved by the Board.
- e. Specifications for planting operations and for support stakes, guy wire and cable, ground anchors, hose, and strapping material shall be as specified in the American Standard Specifications for Nursery Stock published by the American Association of Nurserymen.
- f. The subdivider shall be responsible for maintenance of planted trees and replacement of those that have died or become diseased up and until one (1) full year from time of acceptance of the roadway by the Town. The tree surety shall be full value held from one (1) full year from

street acceptance. No surety for plantings shall be released after November 1 and before April 1.

6.5.0 MONUMENTS

- a. Granite monuments shall be installed on existing street lines at point of curvature intersections with proposed streets.
- b. Reinforced concrete monuments shall be installed on the proposed street line at the point of curvature of intersection with existing street. In addition, one (1) reinforced concrete bound shall be placed so that each lot will have at least one (1) bound where it intersects street R.O.W. and at other points where, in the opinion of the Board, permanent monuments are necessary.
- c. Iron pin monumentation driven at least three feet six inches (3'-6") into the ground with a minimum of six inches (6") exposed and with a diameter of three quarters inches (3/4") is required for all easement comers and property comers.
- d. Monuments shall be a standard permanent granite or reinforced concrete of not less than three feet six inches (3' 6") in length and not less than six (6") in width and breadth and shall have a drill hole one-half inch (1/2") deep, drilled in the center of the top surface or a marked metal disk at the top in the center. Said monuments shall be installed at the time of final grading with the top flush with the top final graded surface. The placement and accurate location of these monuments shall be certified by a registered land surveyor and properly located on the as-built plans.

6.6.0 STREET LIGHTS

Streetlights shall be of the type and style in general use in the Town of Boylston unless otherwise specified by the Planning Board, and shall be located in the grass plots provided in 6.3.0 at such intervals as required by the Town. The location and installation of streetlights shall be in compliance with all applicable regulations of the Boylston Light Department.

6.7.0 STORMWATER MANAGEMENT

6.7.1 General

Subdivision design, grading, and storm drainage facilities shall be designed to prevent significant loss of life and property due to runoff from any ~~unforeseeable~~ *foreseeable* rainfall event, to provide an acceptable degree of convenient access to property during and following frequent storms, and to avoid environmental damage from either storms or the management system itself. Subsurface lot/house drains including footing drains shall not be connected to the street drainage system.

6.7.2 Design Guidelines *and Submittals*

- a. ~~Increases in stormwater runoff resulting from development shall be minimized and retained or~~

~~detained within the development, rather than being piped to existing surface waters. The order of preference by the Board for handling stormwater runoff is as follows:~~

- ~~1. Detention~~
- ~~2. Retention~~
- ~~3. Infiltration~~

~~Calculations by a Registered Professional Engineer shall be submitted and approved by the Board verifying that the peak discharge after development is not more than the peak discharge from the site prior to development for the two (2), ten (10), and one hundred (100) year storm.~~

- ~~b. Stormwater management shall be designed in accordance with the standards described in the Massachusetts Department of Environmental Protection's Stormwater Management Policy (as it may be amended) using current Best Management Practices (BMP). All stormwater shall pass through an oil separator manhole prior to outfall. The manhole shall have a convenient paved vehicular access and if necessary a twenty foot (20') wide easement. Prior to discharge, all stormwater shall pass through a sedimentation basin or other BMP capable of removing eighty percent (80%) of the water borne sediment. All stormwater shall be conveyed in ditches or storm drain lines to stormwater detention retention basins. Permanent easements and provisions for vehicular access shall be provided along the entire length of ditches and storm drain lines.~~
- ~~c. All hydrological calculations shall be determined by the procedures set forth in the current edition of the Soil Conservation Service's Urban Hydrology For Small Watersheds, Technical Release Number 55 (TR55) (as amended). When multiple catchment areas are modeled, Technical Release Number 20 (TR20) shall be used rather than TR55. All assumptions in regard to the type of soil cover shall be determined from the presumptive eventual use (build-out) of the land within the entire tributary area and shall be submitted with the calculations. For pipe design, the Rational Method shall be used.~~
- ~~d. The rainfall amounts shall be determined using Type III 24 hour storm precipitation as referenced in Technical Release Number 55 and 20. The minimum time of concentration for street drainage (Rational Method) shall be five (5) minutes and for cross culverts shall be twenty (20) minutes. Water velocities in pipes and gutters shall be between two (2) and ten (10) feet per second, not more than five (5) feet per second on paved surfaces, and not more than four (4) feet per second in vegetated areas.~~
- ~~e. Detention and Filtration – The Board encourages the use of swales with check dams to detain water. Where practical, catch basins can be drained to swales adjacent to the catch basin, such swales being located generally perpendicular to the roadway and following a curvilinear form. All swales in the subdivision shall be curvilinear and follow topography to appear a natural part of the landscape. Swales used for detention and filtration shall be located at least fifty (50) feet from the outer subdivision boundary line. Swales used solely to intercept or direct water, and in which water will not remain standing, do not need to be set fifty (50) feet away from the subdivision outer boundary line.~~

~~The interior top of slope of detention and filtration systems shall be located on site at least~~

~~seventy five (75) feet from the subdivision boundary line and shall have curvilinear sides, so as to appear a natural part of the landscape. In no case shall the disturbed zone for the basin be less than fifty (50) feet from the property line. Depending upon the size of the subdivision and topography of the land, multiple detention and filtration systems may be required in order to avoid the concentration of water in anyone area of the development. Areas disturbed by construction of detention and filtration systems shall be properly loamed, graded and revegetated. Basins shall be screened from adjacent lots and streets by a greenbelt of evergreen trees and shrubs not more than fifteen (15) feet apart planted in two (2) staggered rows. Such trees and shrubs shall not be less than eight (8) feet in height at time of planting.~~

~~All detention and filtration systems shall be designed so that the bottom of any such facility is elevated at least two (2) feet above estimated seasonal high groundwater elevation and/or bedrock (ledge). Groundwater elevation tests, as conducted by the Board of Health for a septic system, shall be undertaken in the area of the basin to determine such groundwater elevation.~~

~~All basins shall be loamed, seeded and revegetated (with appropriate plantings including trees) in order to foster filtration of pollutants. Basins shall be designed so that ninety percent (90/10) of total volume shall be drained within twenty four (24) hours after cessation of rainfall that generates runoff.~~

~~In order to improve water quality, all such detention and filtration systems shall also be designed to retain the "first flush" of drainage water entering such facilities. In order to accomplish this, the bottom of the outlet of detention and filtration facilities shall be higher than the floor of the basin, and the inlet shall be at least 6 inches higher than the outlet to minimize surcharging. Basin volume below positive outlet shall not be considered part of required storage volume. Sufficient ponding area shall be provided to retain "first flush" drainage water. The Board may require that discharge control shall be accomplished with plate orifices in order to facilitate future adjustment if conditions change.~~

~~Any outlet pipes for water basins shall be shielded with grating designed so that children cannot fall or be drawn into the pipe during a storm. Principal and emergency spillways shall be designed by an engineer and be appropriate to the size and capacity of the basin.~~

~~All manmade embankment areas shall be completely cleared of organic matter. Manmade embankments shall consist of clean inorganic fill, properly compacted with a maximum side slopes of three (3) feet horizontal and (1) foot vertical (3: 1), then loamed (6" minimum) and seeded with grass. The top of any berm shall be flat for a width of ten (10) feet, with one (1) foot of freeboard above the overflow water level. The plans shall include a design detail and cross section of the proposed detention/retention basin, which shall include details of the invert construction at both the inlet and discharge.~~

~~All embankments, whether manmade or existing, shall be composed of a material that does not allow seepage. The engineer is encouraged to design basins and embankments that utilize existing topographic features. The basin (s) shall be designed for aesthetics as well as function.~~

~~The design of the facilities shall be approved by the Board after technical review and comment by the Boylston Highway Department and the Conservation Commission or a private consultant hired by the Board. Detention and filtration systems shall be designed and located in such a manner that their presence shall not threaten life or property. Certification of the above, by the engineer who designed the detention and filtration system, shall appear on the construction drawing.~~

~~Adequate physical access for maintenance purposes shall be provided to detention and filtration facilities. Five (5) foot fencing shall be installed at the outside edge of the top of the berm completely enclosing the basin. A twelve (12) foot gate shall also be installed to allow for vehicular access to the berm. The fence and gate shall be vinyl coated, black post and rail fencing and installed in accordance with the MHD Standard Specifications.~~

~~The Town of Boylston will not accept ownership of detention and filtration facilities located outside of street rights of way, and the maintenance of such detention and filtration facilities shall remain the permanent responsibility of the applicant or his successors and/or assigns.~~

~~f. Closed Drainage System~~ *[Moved]*

~~g. Soil percolation tests shall be conducted at the proposed location of each pit by a Registered Professional Engineer or Registered Soil Evaluator at half the depth and the full estimated depth of the leaching pit. The required wall area or effective absorption area shall be determined from the soil percolation test. The Applicant shall submit to the Board the results of the soil percolation tests and the design of the leaching pits for review and approval.~~

~~h. Lot Drainage~~

~~Lots shall be prepared and graded in such a manner that development of one shall not cause detrimental drainage on another; if provision is necessary to carry drainage to or across a lot, an easement or drainage right of way of a minimum width of twenty feet (20') and proper side slope shall be provided. Storm drainage shall be designed in accordance with the specifications of the Board.~~

Construction site and post-construction stormwater management requirements shall be met by obtaining applicable local, State, and Federal stormwater permits, including, but not limited to:

- a. Earth Removal Permit through the Earth Removal Board;*
- b. Stormwater Control Permit through the Conservation Commission;*
- c. Approval under MGL Chapter 131, Section 40 – Wetlands Protection Act; and*
- d. NPDES General Permit for Storm Water Discharges From Construction Activities.*

The Planning Board may conditionally approve a Definitive Plan contingent upon obtaining applicable stormwater permits. ~~The Applicant shall furnish evidence that adequate provision has been made for the proper drainage of surface and underground waters from any lot or lots. Use of on lot drywells for disposal of roof runoff is encouraged. Stormwater shall not discharge overland across lot lines. Drainage conveyances and easements shall be provided to convey stormwater to the nearest~~

~~permanent stream or municipal drainage system.~~ *submit to the Planning Board verification of permit approval and, upon request, copies of all submittals for the aforementioned permits.*

6.8.0 CLOSED DRAINAGE SYSTEM

Water shall not be allowed to run for more than three hundred and fifty (350) feet on paved surfaces. Catch basins shall not serve as manholes. Leaching basins, if permitted, shall be cross-connected in pairs. Within the R.O.W., storm drains with more than thirty-six inches (36") of cover shall be reinforced concrete pipe Class III and twelve inches (12") minimum inside diameter. Storm drains with less than thirty-six inches (36") of cover but more than twenty-four inches (24") of cover shall be reinforced concrete pipe Class V and shall be twelve inches (12") minimum inside diameter

6.9.0 EASEMENTS

- a. Easements for utilities carrying underground wires, where required, or for utilities across lots, or centered on rear or side lot lines shall be provided where necessary, and shall be at least twenty feet (20') wide.
- b. Where a subdivision is traversed by a watercourse, drainage way, channel or stream the Planning Board may require that there be provided a storm water easement or drainage right-of-way of adequate width and proper side slope.
- c. Access easements to park and conservation land owned by the Town shall be provided, if required by the Planning Board, and shall be at least twenty feet (20') wide.
- d. The developer shall obtain temporary easements or written permission from any abutting property owner if, during the course of construction, it becomes necessary to enter upon their land for construction or planting.

6.10.0 UNDERGROUND UTILITIES

Wiring, cables and fiber optic conduits for the fire alarm system, telephone, electric and electrical street lighting system, cable television or other telecommunications shall be installed underground in the same trench with vertical and/or horizontal separation as approved by the Board and the applicable service providers.

6.11.0 OPEN SPACE AND NATURAL FEATURES

Before approval of a plan, the Planning Board may also in proper cases require the plan to show a park, or parks suitably located for playground or recreation purposes, or for providing light and air. The park or parks shall not be unreasonable in the area in relation to the land being subdivided, and to the prospective use of such land. 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. Each area reserved for such purpose shall be of suitable area, dimension, topography, and natural character for the purposes of a park and/or playground. Each such area shall be so located as to serve adequately all parts of the subdivision as approved by the Planning Board. The Planning Board may also require that the area, or areas reserved shall be located and laid out so as to be used in conjunction with similar areas of adjoining subdivision,

or of probable subdivisions. All areas to be reserved for park and/or playground purposes shall contain not less than one(1) acre, or shall be part of a similar area in an adjoining subdivision so that the total area is not less than one (1) acre. Unless otherwise specifically approved by the Planning Board, the total amount of area to be reserved for park and/or playground purposes shall be no less than ten percent (10%) of the gross area of the subdivision. Any land so reserved shall be graded to dispose properly of surface water, and shall be left in condition for the purpose intended, as required by the Planning Board. Due regard shall be shown for all natural features, historic spots, and similar community assets which, if preserved, will add attractiveness and value to the subdivision.

SECTION VII - REQUIRED IMPROVEMENTS & CONSTRUCTION PROCEDURES FOR AN APPROVED SUBDIVISION

7.1.0 GENERAL

Unless otherwise specified, all the work and materials used in the work to be done shall conform to the requirements of the "Commonwealth of Massachusetts, Department of Public Works, Standard Specifications for Highways and Bridges 1988 Edition and Supplemental Specifications dated 1994, or 1995 Metric Edition", and subsequent amendments thereto, hereinafter referred to as the Standard Specifications as amended, and the Special Provisions included hereinafter. Appropriate illustrations are found in "Commonwealth of Massachusetts, Department of Public Works, Construction 1977 as amended" .

Certain specifications or special provisions shall supplement the aforesaid Standard Specifications, and apply particularly to the work done hereunder. References in the following specifications, unless otherwise stated are to the aforesaid Standard Specifications, these specifications and special provisions shall take precedence, and shall govern.

To facilitate reference, paragraphs following are noted with the paragraph number of the particular section as contained in the Standard Specifications, which pertains.

Wherever in the Standard Specifications, or other contractual documents, the following terms, or pronouns in place of them are used, the intent and meaning shall be interpreted by substitution as follows:

“Commonwealth”	Town of Boylston
“Department Engineer”	The Planning Board of the Town of Boylston, or its Agent acting directly or through an authorized Agent acting directly or through an authorized representative; such representative acting within the scope of the particular duties entrusted to him.
“Road Commissioner”	Planning Board Agent

The extent of work shall be completed as shown upon approved plans, and shall be in compliance with the Standard Cross Section Plans. Stakes shall be set which will indicate the exact amount of cut or fill.

As each construction operation is completed, it shall be approved by the Planning Board Agent, or other proper Town Official previous to starting work in the succeeding operation.

At the time a street or way or portion thereof is ready for acceptance, and to facilitate acceptance by the Town of Boylston, the developer shall have prepared and certified by a Registered Land Surveyor a "Plan of Acceptance" drawn with India Ink on tracing cloth showing widths, lengths, bearings of all boundary lines of streets and easements, and radii and tangents, and central angles of all curves in street lines. It shall show that all permanent bounds have been set according to plans and specifications. A blank space (4" x 8") shall be provided on the lower right hand corner

of the Plan for a title block to be filled in by the Planning Board. The surveyor shall place a certification on the Plan stating "the street (or way or portion thereof) is laid out, and the bounds have been set as shown on the Plan", and shall be dated, signed and the surveyors stamp affixed thereon. The Plan shall be submitted to the Planning Board.

The developer will have the original plans and profiles that were submitted to the Planning Board Office corrected and certified by his Engineer to show the actual as build locations and grads of all utilities and roadway profile, and any changes authorized by the Planning Board.

~~7.2.0 SEDIMENTATION AND EROSION CONTROL PLAN~~

~~A Comprehensive Sedimentation and Erosion Control Plan shall be submitted to the Board and/or other Town Agencies, showing the staging of construction and the measures to limit water borne and wind induced erosion, which shall include, but not limited to, quick rooting vegetation, expeditious stabilization of disturbed area, hay bales, diversions siltation fences, and sedimentation basins. The pre development and construction stage sediment loadings in all watercourses shall be calculated using the Universal Soil Loss Equation.~~

~~No earth shall be removed from the area shown on a Definitive Plan except in accordance with the approved plan.~~

~~As each construction operation is completed, the Board or its agent shall be notified at least forty-eight (48) hours in advance for necessary inspections by the proper Town authority and/or Gas and Electric Department prior to starting work on the succeeding operation.~~

7.2.0 FLOOD HAZARD AVOIDANCE

Any subdivision located in any part within the Flood Hazard District established under the Zoning By-law shall comply with the following: Subdivision design shall be consistent with the need to minimize flood damage within the flood-prone area, through use of street profile design and drainage. All public utilities and facilities, such as sewer, gas, electrical and water system shall be located and constructed to minimize or eliminate flood damage. Drainage systems shall be designed in consideration of possible impact of flooding at the Base Flood Elevation.

7.3.0 STREET AND ROADWAY

Roadways shall be constructed for the full length of all streets within the subdivision, and shall have the same curve radius required in Section 6.2.2. The centerline of all roadways shall coincide with the centerline of the street right-of-way unless a deviation is approved by the Planning Board. The minimum width of roadways shall be as set forth in Section 6.2.4.

The roadway shall be graded and prepared for pavement as follows:

- a. clearing and grubbing of the entire area of such street or way shall be performed to remove all stumps, brush, roots, and like material which may exist upon the surface, but wherever

- possible, existing vegetation shall be protected. Cleared materials shall be removed from the property unless otherwise approved by the Board.
- b. roadway earth excavation shall be removed of all unsuitable materials encountered down to the true surface of the subgrade, in preparation for the foundation of roadway, sidewalks, driveways and berms. Approved material such as gravel and loam obtained in the excavation may be used in fills as required if, in the opinion of the Planning Board Agent, they are suitable.
 - c. when in the opinion of the Planning Board Agent, suitable material is not available within the limits of the highway location to form the sub-grade or sub-base, the contractor shall obtain such additional material from sources in accordance with this Section, and as may be approved by the Planning Board Agent.
 - d. the sub-grade surface, fifteen and one-half inches (15 1/2") below the finished grade in residential streets and seventeen and one half inches (17 1/2") below the finished surface grade in all streets in industrial subdivisions shall be prepared true to the lines, grades, and cross sections given and properly rolled. All soft or spongy material below the sub-grade surface shall be removed to a depth determined by the Planning Board Agent, and the space thus made shall be filled with special gravel borrow, containing no stones over six inches (6") in their largest diameter. The subgrade shall be brought to proper grade and compacted as shown on the profiles and in accordance with the approved cross section. No gravel sub-base shall be placed until all earthwork and utility installation work has been completed.
 - e. A gravel base shall be spread on the prepared surface of the sub-grade to a compacted depth of twelve inches (12"). Gravel shall be spread in layers of not more than six inches (6"), and each layer shall be properly compacted. Gravel shall conform to the requirements of the Standard Specifications for gravel borrow, Section M 1.03.0., Type b. A certificate of compliance indicating the gradation and source of material shall be submitted and approved prior to delivery of any material to the site. Each layer shall be thoroughly watered, rolled and compacted to ninety-five percent (95%) of the maximum density (ASTM D-1557) for the gravel and true to line and grade. Any depressions that appear during and after the rolling shall be filled with additional gravel and re-rolled until the surface is true. Mirafi, Supac, or other geotextile fabric sub grade stability fabric may be required by the Board prior to gravel placement.
 - f. Final grading, rolling and finishing including shaping, trimming, rolling and finishing of the surface of the sub-base prior to application of gravel for surfacing the roadway and base courses for walks, or loam for berms shall conform to the MHD Standard Specifications and shall be in accordance with this Section as directed by the Planning Board Agent.

At the conclusion of this step the roadway shall be staked in all locations where permanent monuments are to be installed.

The wearing surfaces of roadways shall be of Class I bituminous concrete pavement (asphalt), Type I-I blended using only new material for the top course. Reclaimed Asphalt Pavement (RAP) may be used for the binder course. Copies of the supplemental certification must be submitted for both the binder and top course material for approval of the Board. The material and construction methods for laying pavement shall conform in every way to the applicable sections of Section 400 and Section M of the Standard Specifications except that

no paving shall be undertaken before April 1st of any year or after November 15th of any year without prior written permission of the Board. Up to fifty percent (50%) of the lots may be released prior to paving the binder course if approved by the Board. Pavement shall be placed and compacted in two courses, binder and top courses in thicknesses shown on the "Dimensions Key" below except for the industrial streets where pavement shall be placed and compacted in three courses, base, binder, and top courses.

DIMENSIONS KEY

	Right of Way or Layout "A"	Width of Pavement "B"	Depth of Top Course "C",	Depth of Binder Course "D"	Depth of Base Course "E"	Design Speeds "F"
Industrial Street	50'	28'	1"	1"	2"	30
Collector Street (25+ Homes)	50'	28'	1"	2"	0	30
Local Street (7-24 Homes)	50'	28'	1"	2"	0	25
Dead End Street (1-6 Homes)	50'	28'	1"	2"	0	20

The Board may require the installation of Petromat fabric or an approved equal over any areas in the sub-base, base pavement that, in their opinion, require reinforcement prior to the placement of an additional course of pavement or gravel.

All structures shall be brought up to binder grade within two (2) weeks prior to paving the binder course. All structures shall be brought up to finish grade, using grade rings, within two (2) weeks prior to paving top course.

All trench cuts shall be saw cut to provide a uniform line in roadway. The trench shall be filled with flowable fill conforming to the Standard Specifications.

Embankments outside of the right-of-way shall be evenly graded, and pitched at a slope of not greater than two (2) horizontal to one (1) vertical fill. Where cuts are made in ledge, other slopes may be determined with the approval of the Planning Board or its Agent. Where terrain necessitates, greater slopes, retaining walls, terracing, fencing, or rip-rap may be used either alone or in combination to provide safety and freedom from maintenance, but must be done in accordance with plans filed with the Planning Board, and approved by the Planning Board Agent. Whenever embankments are built in such a way as to require approval by the Planning Board Agent, the subdivider must furnish to the Town duly recorded access easements for maintenance of the slopes, terraces, and retaining walls. All such slopes shall be grassed in accordance with the specifications above for the area between the roadway and sidewalk, or roadway and boundary of the right-of-way.

7.5.0 UTILITIES

Water mains, wells, and their appurtenances shall be installed in accordance with the rules of the Planning Board in order to supply each lot with an adequate water supply for domestic use approved by the Board of Health, and for fire protection, approved by the Fire Chief. Where it is practical to connect to the public water supply or required by the Fire Department, private wells shall not be permitted as the source of water to the proposed subdivision.

The telephone, alarm systems, and cable TV shall be developed in accordance with the governing agencies eventually responsible for their maintenance and ownership. The sewer, water, and storm drainage shall be approved by the Town of Boylston Highway Department.

Connections for drain, water and telephone services from the main structure in the right-of-way to the property line shall be constructed for each lot whether or not there is a building thereon, except that the Board may waive such requirement, in whole or in part, in the case of a lot to be used for a park, playground or for any other purpose for which in the opinion of the Board, such connections shall not be required.

NOTE: Under current Department of Telecommunications and Energy Rules and Regulations, gas and electric service line stubs cannot be installed. Any and all unused service lines and service stubs (to the property line) shall be cut and capped in the main with five years of non-use. Electric connections on underground system shall be at corner of property line with an appropriate hand hole or means of servicing provided.

Excavation for structures including foundations for drains, sewers, and water pipes, walls and other structures shall be made to the depth as indicated on Plans. Rock excavation designated as Class B, encountered in trench excavation shall be removed as directed by the Planning Board Agent. Also, if unsuitable material needs to be removed to ensure a proper sub grade, two (2) feet below grade shall be removed and replaced with special borrow conforming to M.1.02.0 in accordance with the Standard Specifications.

All drain, sewer, gas, and water pipes, and other structures shall be installed upon the completion of roadway sub-grade, and before the placing of the sub-base, gravel-base course, sidewalks or pavements. If the pavement is removed, excavated or damaged, the trench shall be repaved to the lines, grades and dimensions approved by the Board or its Agent in accordance with the Standard Specifications.

Pipes, manholes, and catch basins for the disposal of surface or sub-surface water shall be provided according to the sizes and depths as indicated on the Plan, and in conformity with the requirements of the Standard Specifications. The standard depth of catch basins shall be four (4) feet below the outlet invert. Manholes shall be constructed to the required depth of each junction point, and as shown on the Plan. Pipe culvert and pipe drains shall be in conformity with the requirements of the Standard Specifications installation of pipes.

Reinforced concrete pipe (uses on all cross drains under pavement) shall be installed according to

the size shown on the plans. No backfilling of pipes shall be done until the installation has been inspected by the Planning Board or its Agent.

All drainage trenches except cross drains shall be filled with clean gravel borrow in accordance with Standard Specifications. All cross drain trenches shall be backfilled with selected material satisfactory to the Planning Board Agent.

All drain, gas and water pipes, underground utilities, and other structures shall be installed to the right-of-way line upon the completion of roadway sub grade and before the placing of the sub-base, gravel base course, sidewalks or pavement. If the pavement is removed, excavated or damaged, the trench shall be repaved to the lines, grades and dimensions approved by the Board or its Agent in accordance with the Standard Specifications.

On-site sewerage disposal facilities shall be installed and constructed in conformity with the rules, regulations, and requirements of the Board of Health.

Installation of telephone, cable TV, other telecommunication, and electric lines shall be underground (See section 6.9.0).

Where adjacent property is not subdivided, or where all the property of the Applicant is not being subdivided at the same time, provision shall be made for the extension of the utility system by continuing the mains the full length of streets, and to the exterior limits of the subdivision, at such grade and size which will, in the opinion of the Planning Board permit their proper extension at a later date. If the electric system is terminated, it must have at the termination point an appropriate piece of switch gear which allows for expansion.

7.5 .1 Water System

Water pipes and related equipment, such as hydrants and main shutoff valves, corporation shutoff valves, service pipe to curb boxes, curb boxes and blowoffs, shall be installed within every subdivision as necessary to provide all lots on each street with adequate water supply for domestic and fire protection use. Such system shall be installed if it is to be connected to a public system. Public water mains, house connections, and related facilities shall be installed to the standards of the Town of Boylston Water District and the Morningside Water District. Water mains shall be Class 52 cement-lined ductile iron pipe and shall not be less than eight inches (8") in diameter unless approved by the Board in conjunction with the Town of Boylston Highway Department. Pipe joints shall be push-on type.

Where possible, the water service shall be installed at the right hand corner of the proposed lot and capped. For purposes of planning water service locations, each house and septic system shall be shown on the Definitive Plan, and the water service shall be shown taking into account the location of each house's location and septic system location on the lot.

Hydrants shall be provided every five hundred (500) running feet or part thereof on one side of each street unless a greater distance is approved by the Chief of the Fire Department, in writing. In any case, there shall be a minimum of one (1) hydrant in each subdivision. The first hydrant of

the subdivision shall be located at the beginning of the subdivision at the intersection with the existing street. If the subdivision consists of a dead-end street, there shall also be a hydrant at the end of the cul-de-sac. Each hydrant shall be located behind the sidewalk or six and one half feet (6 1/2 ') behind the gutter line.

Each hydrant shall be served directly from the water main through an eight inch (8") lateral connection. They shall be of a style approved by the Water Districts. The deliverable fire flow shall meet current ISO requirements for all existing/potential structures served. Minimum flow requirements shall be as specified by the Water Districts. Flow calculations shall be submitted based upon fire flow and peak domestic use and current, site specific flow tests. Water main gate valves shall be located in such number and locations that lines by individual block may be isolated for maintenance purposes. Hydrant gates shall be located within the paved roadway surface.

The Water Districts shall be notified forty-eight (48) hours in advance of any testing or disinfecting of the lines. The entire system shall be pressure tested and disinfected in accordance with American Waterworks Association Standards (A W W A) and approved by the Water Districts prior to acceptance.

7.5.2 Electricity And Other Cables

Wiring for the fire alarm system, telephone, electrical street lighting system and, if any, cable television shall be installed underground in the same trench with vertical and/or horizontal separation as approved by the Board and the Cable company. Service shall be provided to each lot and each streetlight before the subgrade is prepared. When any of these services crosses the roadway Schedule 40 conduit encased in concrete or Schedule 80 conduit shall be used. The Board may permit transformers, switches and other such equipment to be placed on the ground in approved locations, screened from view with evergreen shrubbery.

Electric street lighting and service along streets shall be provided and installed by the subdivider. Poles shall be placed in the grass strip along the road or 'other location at discretion of the Board. Electric service should include main power supply service.

7.5.3 Gas

Gas mains shall be installed if gas connection is available. The regional gas provider shall be notified by the developer upon approval of the Definitive Plan so that installation of gas mains may be completed without undue delay. If excavation is made after the sub grade is completed and inspected, the mains shall be put in a trench covered with pavement to the lines, grades and dimensions approved by the Board or its Agent.

The gas line shall not be located on the same side of the R.O.W. as the sidewalk and the electric, telephone and cable utilities.

7.5.4 Fire Alarm System

Fire alarm systems shall be provided and installed by the subdivider where required by the Boylston Fire Department.

7.5.5 Fire Water Supply

All subdivisions shall have a water supply for fire protection and suppression. When determined by the Planning Board that it is possible to install municipal water mains and hydrants the developer may be required to do so. If it is not possible to install municipal water the developer shall install either a fire pond with dry hydrant or a cistern system. In subdivisions with extensive road systems where the proposed buildings are located more than one thousand feet (1,000') from the water supply, the Planning Board may require more than one water supply.

- a. Definitions - For the purpose of this Section, the following terms, phrases, words, and their deviations shall have the meanings herein given.
 1. Acceptance Testing- A test conducted by the Boylston Fire Department utilizing the system for a predetermined period of time. The purpose of this test is to insure proper operation and recharge.
 2. Cistern- see NFP A 1142
 3. Annex Dry Hydrant System- see NFP A 1142
 4. NFP A- National Fire Protection Association
- b. General Regulations
 1. Any subdivision containing three (3) or more residential buildings or one (1) industrial or commercial building(s) more than one thousand (1,000) feet beyond a municipal fire hydrant with a capacity of delivering in excess of five hundred (500) gallons per minute, shall comply with the requirements of this Section. Determination of the one thousand (1,000) feet distance shall be the distance from the hydrant to the nearest point of the farthest building from the hydrant along a route that fire apparatus would be expected to travel, and be acceptable to the Fire Chief.
 2. A dry hydrant system or a cistern shall be installed for the exclusive utilization of essential fire and maintenance personnel.
 3. The capacity of these dry hydrant systems shall be in conformance with the current requirements of NFP A 1142. Capacity will be based upon the required fire flow for the structures being constructed. For residential areas, a minimum capacity will be twelve thousand (12,000) gallons. For industrial or commercial structures, the minimum capacity will be twenty five thousand (25,000) gallons. Farm and agricultural uses will be exempt from these requirements for accessory use. Residences shall not be exempt.
 4. Prior to issuance of the Building Permit for the third residence, these systems shall be complete and fully operational.
 5. All cisterns are to be designed in accordance with the current edition of NFP A 1142, and are to include:

- (a) A four and one-half inch (4 1/2") National Standard Thread (NST) male connection with female cover or other connection as determined by the Fire Chief, within fifteen (15) feet of maintained vehicle access.
 - (b) A minimum six-inch (6") diameter drilled well with a minimum twenty-five foot (25') casing and drive shoe, equipped with a minimum one-half (1/2) horsepower well pump to provide a 5-10 GPM constant flow, or other water supply acceptable to the Fire Chief.
 - (c) A minimum thirty-two inch (32") manhole.
 - (d) An eight-inch (8") vent constructed of ASTM Schedule 40 PVC. (e) A clappered Siamese two and one-half inch (2 1/2") female National Standard Thread fill connection, or other connection acceptable to the Fire Chief.
 - (f) A lighted control panel with green power-indicating light-emitting diode (LED) and two-level flashing red indicator and orange pump running indicator. These indicator lights shall be appropriately labeled. The developer must construct a mounting panel and have metered power connected to the cistern after obtaining all necessary electrical permits.
 - (g) The tank itself shall be constructed of reinforced concrete and be lined with an approved plastic liner or rubber membrane. All components shall be consistent with the specifications of MFP A 1142.
 - (h) A sign that has a minimum one-inch (1") white reflective letters on a red reflective background. Signage shall state:

Fire Department Cistern	Fire Department Dry Hydrant
_____ Capacity	_____ Capacity
ID# _____	ID# _____
 - (i) All suction and fill piping shall be ASTM Schedule 40 steel. Vent piping shall be ASTM Schedule 40 PVC with glued joints painted with an epoxy paint to prevent ultra-violet degradation. Suction piping shall be painted red. All other exposed piping shall be painted black.
 - (j) Suction piping inside the tank shall be of a size to deliver the required fire flow and shall have a listed mesh screen installed vertically at the bottom of the cistern at a height of six inches (6") off the bottom of the cistern attached by a 4' x 4' x 1/4" anti-vortex plate.
 - (k) All fire department pump and suction connections shall be protected from damage by either stanchions, posts, or landscaping.
 - (l) All electrical control, boxes, and manholes shall be locked with "keyed alike" padlocks. Master lock number shall be obtained from the Fire Department.
6. Land that the cistern or actual dry hydrant connection sits on shall be deeded to the Town in fee or easement in consideration of one dollar (1.00).
7. Dry hydrants shall have the following:
- (a) A four and one-half inch (4 1/2") male National Standard Thread nipple with cover, or other connection determined by the Fire Chief, located within fifteen feet (15') of maintained vehicle access.
 - (b) Signage as described under 7.5.5.b.5(h).
 - (c) Design of dry hydrants shall include usage of worksheet B-5.3.3 NFPA 1142. 8. The proposed system will be designed by and stamped by a Massachusetts Registered Fire Protection Engineer. The plans are to be submitted to the Fire Chief for review and comment. The developer must also submit a proposal for maintenance of the system along with any necessary bonding or easements for approval by the Planning Board.

8. After completion of construction, final as-built drawings must be submitted, certified and stamped by the design engineer, and an acceptance test conducted by the Fire Department.
9. The developer must also file and receive approval from the Conservation Commission prior to construction if the requirements of the Wetlands Protection Act apply to the site.

7.6.0 SIDEWALKS

Bituminous concrete sidewalks ~~with a formed bituminous concrete berm~~ as approved by the Planning Board Agent, having a minimum thickness of three inches (3 ") after compression, shall be constructed on an eight inch (8") gravel foundation to the required lines and grades in accordance with these specifications. The contractor may install a ~~machine~~ formed bituminous concrete curb *or berm*, cross section to be approved by the Planning Board Agent ~~in place of berm, if desired~~ *deemed necessary*.

If desired, Granolithic sidewalks may be constructed as directed by the Planning Board or its Agent in conformity with this section of the Standard Specifications.

Use of permeable pavement, as approved by the Planning Board, shall be designed in accordance with the Massachusetts Stormwater Technical Handbook (as amended) or equivalent design guidelines and specifications approved by the Planning Board. Runoff shall be directed away from permeable paving surfaces as the introduction of dirt or sand onto the permeable paving surface when transported by runoff from elsewhere will contribute to premature clogging and failure of the paving. Permeable paving should be one of the last items to be constructed on a development site, after most heavy construction vehicles are finished and after the majority of the landscaping work is completed. Permeable pavement shall not be used on slopes steeper than 5%. Permeable pavements are not appropriate for gas stations, truck stops, or areas in which high concentrations of hydrocarbons or other pollutants can be leached into soil.

7.7.0 STREET SIGNS & STREET LIGHTS

Street signs and street lights shall be installed according to the standards and specifications of the Boylston Highway Department and the Boylston Light Department, respectively.

7.7.1 Street Signs

From the time of rough grading until such time as each street is accepted by the Town as a public way, the sign posts at the intersection of such street with any other street shall have affixed thereto a sign designating such street as a private way.

Street signs for each intersecting street shall be installed at each intersection to conform to those used by the Boylston Highway Department, and installed at a location as approved by the Highway Department.

7.7.2 Stop Signs

Stop Signs shall be installed at the time of rough grading at each intersection to conform to those used by the Boylston Highway Department and installed at a location as approved by the

Highway Department.

7.7.3 No Parking Signs

"No Parking Signs" shall be installed at the entrance to the development and around the end of the cul-de-sac as designated and approved by the Boylston Highway Department. Additional "No Parking" signs may be required as requested by the Highway Department.

7.7.4 All permanent street signs must be installed prior to the Board's approval to the release of any lots.

7.8.0 CLEANUP

Any area disturbed by the construction and all rights-of-way shall be cleaned up so as to leave the area shown on the plan in a neat and orderly appearance free from debris, tree stumps, loose rocks, mounds of dirt or other objectionable material. Said material shall be removed from the site and properly disposed of.

7.9.0 MAINTENANCE OF IMPROVEMENTS

For the purpose of protecting the safety, convenience and welfare of the Town's inhabitants for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel for reducing the danger to life and limb in the operation of motor vehicles for securing safety in the case of fire, flood, panic and other emergencies; under the authority of M.G.L. c. 41, § 81M as amended, the Applicant or his/her successor shall provide for the proper maintenance and repair of improvements during the period of construction.

SECTION VIII - ADMINISTRATION

8.1.0 AUTHORITY

The Planning Board shall be the administrative agency of these regulations, and shall have all of the powers assigned them by Section 81A to 81GG, inclusive of Chapter 41 of the Mass. General Laws. The Planning Board may assign as their agents appropriate Town agencies or officials, and may from time to time hire professional assistance to review plans, and inspect improvement at the cost of the subdivider.

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.

8.2.0 FEES

8.2.1 Administrative Fee

- a. An Administrative Fee shall be assessed to offset the expense of review by the Planning Board and its office. Additionally, the Applicant shall be responsible for all required advertising, public notice and abutter notification mailings.
- b. Administrative Fees are to be submitted as part of the initial application. An application filed without the inclusion of these fees shall be determined to be incomplete and no review work shall commence until all submission requirements have been met.
- c. Since Administrative Fees are imposed for the review process, they are not linked in any way to the determinations of the Planning Board. There are no fees charged for approvals or permits resulting from that review process.
- d. Once the review process has been started, there shall be no refunding of Administrative Fees, including the case of withdrawal of the application by the Applicant. For this reason, it is important that Applicants consult with the Planning Board office prior to formal application to ensure that the appropriate permits and review are being sought.

8.2.2 Schedule Of Administrative Fees

The following is the schedule of fees for all types of applications that come before the Planning Board.

- a. ANR Plans - Determinations on Approval Not Required plans shall require a fee of \$100.00 for plans showing a lot line change or \$100.00 plus \$75.00 for each new lot shown on the plan.
- b. Preliminary Plans - Review of Preliminary Plans shall require a fee of \$200.00 plus \$100.00 for each building lot shown on the plan.
- c. Definitive Plans - Review of Definitive Plans shall require a fee of \$500.00 plus \$200.00 for each building lot shown on the plan.
- d. Modification of a Definitive Plan - Consideration of a Modification to a Definitive Plan shall

require a fee of \$100.00 plus \$100.00 for each new building lot created. The total fee required shall be the addition of all fees outlined above, and conformance of the submitted fee and the actual review work shall be subject to review by the Board during the review process.

8.2.2 Waivers And Modifications

The Planning Board, at its option, may waive or reduce any fee under these provisions, if, in the opinion of the Board, unusual circumstances result in an application fee not envisioned or intended with the adoption of these regulations and fee schedules. Such judgment by the Planning Board shall require a motion carried by a majority of the Board members.

8.2.3 Project Review Fees

- a. In addition to an Administrative Fee, the Planning Board shall require a Project Review Fee. This fee is to be deposited into a special account as enabled by G.L. Chapter 44, Section 53G, referred to herein as the "593 Account". This fee shall be imposed on those applications which, as designated by the Planning Board, require the services of outside consultants for the review process due to the size, scale or complexity of a proposed project, because of a 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 who can assist the Board in analyzing a project to ensure compliance with all relevant laws, ordinances, bylaws 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.
- b. Monies shall be collected from the Applicant and deposited into the 593 Account upon submission of the application. The Applicant shall also furnish the Town Treasurer with either a federal identification number or a social security number for earned interest reporting to the Internal Revenue Service.
- c. Outside consultants retained by the Planning Board to assist in the review of an application shall be paid from this account.
- d. The Planning Board shall determine the amount of initial deposit to be made, as put forth in the accompanying schedule, and the amount of any additional funds required during the process, should the Applicant's 593 Account approach depletion. Such determinations shall be consistent with the requirements of this Section.
- e. Any excess amount attributable to a particular project, including accrued interest, will be repaid to the Applicant, or the Applicant's successor in interest, at the conclusion of the review process. For the purpose of this regulation, any person or entity claiming to be an Applicant's successor in interest shall provide the Board with documentation establishing such succession in interest.

8.2.4 Schedule Of Project Review Fees

- a. Initial Deposits - The following Project Review Fees for the indicated application types are to be submitted with their initial applications.

1. A Preliminary Plan, Modification of a Preliminary Plan, or Modification of a Definitive Plan shall require the following initial Project Review Fee:

Project Size	Fee
2 - 7 Lots/Units	\$2,000.00
8 - 20 Lots/Units	\$3,000.00
More than 20 Lots/Units	\$5,000.00

2. A Definitive Plan shall require the following initial Project Review Fee:

Project Size	Fee
2 - 7 Lots/Units	\$6,000.00
8 - 20 Lots/Units	\$10,000.00
More than 20 Lots/Units	\$12,000.00

- b. Subsequent Deposits - When the balance in an Applicant's 593 Account falls below twenty-five percent (25%) of the initial Project Review Fee, as imposed above, the Planning Board shall consider whether to require a supplemental Project Review Fee to cover the remaining project review and the attendant costs still to come.

8.2.5 Review Fee Administrative Appeal

- a. The choice of a consultant selected by the Planning Board for the review of an application or the fee charged for said consultant 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.
- b. The Selectmen shall convene a formal hearing within twenty (20) days of receiving a written appeal filed by an Applicant.
- c. The required time limits for action upon an application by the Planning Board shall be extended by the duration of the administrative appeal.
- d. If no decision is rendered by the Board of Selectmen within one (1) month following the filing of the appeal, the selection made by the Planning Board shall stand.
- e. This administrative appeal shall not preclude further judicial review, if otherwise permitted by law, on the grounds provided for in this section.

8.3.0 WAIVER OF COMPLIANCE

Strict compliance with the requirements of these Rules & Regulations may be waived only when, in the judgment of the Board, such action is in the public interest, and not inconsistent with the Subdivision Control Law. In waiving strict compliance, the Board may require such alternative conditions as will serve substantially the same objective as the standards and regulations waived.

8.4.0 LOT RELEASE

Prior to any lot release, the drainage system for the entire subdivision must be completely installed

including all appurtenances such as drainage structures, piping, flared end sections, basins, swales, fencing, trees, and 10aming and seeding.

8.5.0 BUILDING PERMIT

The Building Inspector shall not issue any permit for the erection of a building until he is first satisfied that the lot on which the building is to be erected is not within a subdivision, or that a way furnishing access to such lot, as required by the Subdivision Control Law is shown on a plan recorded, or entitled to be recorded under Chapter 41, Section 81X, as amended, and that any condition endorsed thereon limiting the right to erect or maintain buildings on such lot have been satisfied, or waived by the Planning Board, and in the event that the Planning Board has by rule or regulation required that not more than one building for dwelling purposes be erected, or placed or converted to use as such , on any lot without its consent, that the Building Inspector is satisfied that such consent has been obtained. Chapter 41, Section 81 Y, and amendments thereto.

8.6.0 INSPECTIONS

Inspections shall be arranged for by the applicant with the Planning Board or its Agent prior to and during the construction of streets, and with the proper Town official(s) prior to the installation of utilities. The Board will provide the applicant with a list of required inspections at the time of subdivision approval.

8.7.0 SEPARABILITY

If any section, paragraph, sentence, clause, or provisions of these regulations shall be adjudged not valid, the adjudication shall apply only to the material so adjudged, and the remainder of these regulations shall be deemed valid and effective.

8.8.0 AMENDMENTS

These 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.