

**Rules and Regulations
Governing the Subdivision of Land
In the
Town of Williamsburg, Massachusetts**

**Approved by the Planning Board of the Town of
Williamsburg on 10/03/05**

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**Rules and Regulations Governing the Subdivision of Land in the
Town of Williamsburg, Massachusetts**

(Adopted under the Subdivision Control Law Sections 81-K to 81
GG inclusive, Chapter 41, G.L.)

**SECTION 1:00
TITLE, PURPOSE, AND AUTHORITY**

1:01 Title.

These Rules and Regulation of the Williamsburg Planning Board shall be known and may be cited as the "Rules and Regulations Governing the Subdivision of Land, Town of Williamsburg, Massachusetts", which herein are called "Rules and Regulations".

1:02 Purpose.

These Rules and Regulations have been enacted for the purpose of protecting the safety, convenience and welfare of the inhabitants of Williamsburg, by regulating the laying out and construction of ways in subdivisions providing access to the several lots therein, but which have not become public ways and ensuring sanitary conditions in subdivisions and in proper cases parks and open areas. The powers of the Planning Board and the Board of Appeals under the Subdivision Control Law (MGL Chapter 41, Sections 81K-81GG inclusive) and under these Rules and Regulations shall be exercised with due regard for the provision of adequate access to all the lots in the subdivision by ways that will be safe and convenient for travel; for lessening congestion in such ways and in the adjacent public ways; for reducing danger to life and limb in the operation of motor vehicles; for securing safety in the case of fire, flood, panic and other emergencies; for insuring compliance with applicable zoning ordinances or by-laws; for securing adequate provision for water, sewerage, drainage, and other requirements where necessary in a subdivision; and for coordinating the ways in a subdivision with each other and with the other ways in the Town and with the ways in neighboring subdivisions. It is the intent of the Subdivision Control Law that any subdivision filed with the Planning Board shall receive the approval of the Board of Health and to these Rules and Regulations; provided, however, that the Planning board may, when appropriate,

waive, as provided for in Chapter 41, Section 81R, MGL, such portions of the rules and regulations as it deems advisable.

1:03 Authority.

Under the authority vested in the Planning Board of the Town of Williamsburg by Section 81Q of Chapter 41, MGL, the said Board has adopted these Rules and Regulations Governing the Subdivision of Land in the Town of Williamsburg.

SECTION 2:00
DEFINITIONS

For the Purpose of these Rules and Regulations, unless a contrary intention clearly appears, the terms and words defined in the Subdivision Control Law shall have the following meanings:

Applicant. Either the owner of the land stated in the application for subdivision or all the owners where title is held jointly, in common, or in tenancy by the entirety, including corporations. An agent, representative, or assignee may act for an owner, provided written evidence of such fact is submitted. Evidence in the form of a list of their officer and designated authority to sign legal documents shall be required for a corporation.

Board. The Planning Board of the Town of Williamsburg.

Certified by (or endorsed by) a 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 any other person authorized by the Planning board 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 Planning Board.

Engineer. Any person who is registered or otherwise legally authorized by the State of Massachusetts to perform professional civil engineering services.

Owner. The owner of record as shown by the records in the Hampshire County Registry of Deeds.

Plan, Definitive. A proposed, detailed plan of a subdivision submitted by the applicant to be recorded in the Registry of Deeds or Land Court when approved by the Planning Board.

Plan, Preliminary. A plan of a subdivision submitted by the applicant showing sufficient information to form a clear basis for discussion and clarification of its general contents and for the preparation of a Definitive Plan.

Street.

1. **Local.** A street having an Average Daily Traffic (ADT) not to exceed 500, which primarily provides access to and serves adjacent land uses.
2. **Collector.** A street which receives and distributes traffic from and to various sub-areas within a given region and receives traffic from a given residential neighborhood or industrial area and carries it to a major street. These streets can carry significant volumes of traffic (ADT ranges typically from 1,500 to 3,500).
3. **Major.** A street having the primary purpose of carrying through traffic and the secondary purpose of providing access to abutting property (ADT's are typically in excess of 3,500).

Subdivision. "Subdivision" shall generally mean the division of a tract of land into two or more lots and shall include re-subdivision, and when appropriate to the context, shall relate to the process of subdivision of the land or territory subdivided. Subdivision and division of land that do not constitute a subdivision are further defined in the Massachusetts Subdivision Control Law, MGL c. 41, sec. 81-K to 81-GG inclusive and applicable case law.

Subdivision Control Law. Sections 81K to 81-GG, inclusive, of Chapter 41, of the General Laws of the Commonwealth of Massachusetts, entitled "Subdivision Control", as last amended.

Surveyor. A person who is registered or otherwise legally authorized by the State of Massachusetts to perform land surveying services.

Way. A right-of-way or means of access to a lot. A public way is a way which has been accepted by, and the land owned by, the Town of Williamsburg or by other means created as a public street. Any other way (private way) is a way over land which is owned by a private party, but which is set forth by deed covenant, deed description, or other means as a private way.

SECTION 3:00
GENERAL

3:01 Limitation of One-Dwelling on any Lot.

Not more than one building designed or available for use for dwelling purposes shall be erected or placed or converted to use as such on any lot in a subdivision, or elsewhere in the Town of Williamsburg. 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.

3:02 Waiver of Compliance.

The Planning Board may, in special and appropriate cases, waive strict compliance with such portions of these Rules and Regulations, as provided for in section 81-R, Chapter 41, of the General Laws, where such action is in the public interest and not inconsistent with the purpose and intent of the Subdivision Control Law.

Limited waivers may be granted when appropriate to encourage development which is in keeping with the character of surrounding neighborhoods and to encourage a permanent pool of affordable housing.

A request for a waiver of a requirement, rule or regulation shall be made in writing by the applicant, and submitted, whenever feasible, with the submission of the Preliminary Plan.

If the Planning Board approves the request for a waiver, it shall endorse conditions of such waiver (if any) on the plan or set them forth in a separate instrument attached to and referenced to the plan, which shall be deemed a part of the plan. The Planning Board shall notify the applicant in writing of its approval, disapproval, or approval with conditions.

3:03 Amendments.

These Rules and Regulations or any portion thereof may be amended from time to time in accordance with Section 81-Q of the Subdivision Control Law.

3:04 Validity.

The invalidity of any section, paragraph, clause or provision of these Rules and Regulations shall not invalidate any other section, paragraph, clause or provision therein.

3:05 Coordination with Municipal Departments and Other Agencies.

In the Town of Williamsburg certain services are provided to subdivisions under the jurisdiction of various Town Departments and other private agencies. Compliance with the applicable regulations and requirements of these agencies and departments shall be required before a plan is approved by the Planning Board, and certification of performance relative to the proper construction and installation of respective utilities shall be required before the performance guarantee can be reduced or released.

3:06 Forming a Subdivision.

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, approved and endorsed by the Planning Board as hereinafter provided and recorded at the Hampshire County Registry of Deeds.

3:07 Effect of Prior Recording of Subdivision of Land.

The recording of a plan of land within the Town in the Registry of Deeds of Hampshire County prior to the effective date of the Subdivision Control Law in the Town of Williamsburg, showing the division thereof into existing or proposed lots, sites or other divisions and ways furnishing access thereto, shall not exempt such land from the application and operation of these Rules and Regulations, except as specifically exempt by Section 81-FF of the Subdivision Control Law.

3:08 Compliance with Zoning Ordinance.

No plan of a subdivision shall be approved unless all of the building lots shown on the plan comply with the Zoning Bylaw of the Town of Williamsburg, Massachusetts. (See also Sec. 6:01.)

3:09 Requirements for more Stringent Standards.

The Planning Board may, in special and appropriate cases, require the developer to follow more stringent standards than the ones mentioned in these Rules and Regulations. In doing so, the Planning Board shall notify the developer in writing of said standards and the reason they are required.

SECTION 4:00
PROCEDURE FOR SUBMISSION AND ENDORSEMENT OF NON-SUBDIVISION
PLANS (PLANS BELIEVED NOT TO REQUIRE APPROVAL)

4:01 General.

A division of land which is not a subdivision under the above definition does not require Planning Board approval under the Subdivision Control Law. 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, must submit a mylar original and three prints of his plan with application Form A (see Appendix B) to the Planning Board, accompanied by the necessary evidence to show that the plan does not require approval, including but not limited to, frontage, square footage, and structure(s) on the effected parcels. The filing fee, as calculated in Section 11:00, must be included with the application. Said person shall file, by delivery or registered mail, a notice with the Town Clerk stating the date of submission, accompanied by a copy of said application form. If the notice is given by deliver, the Town Clerk shall, if requested, give a written receipt therefore.

If the Planning Board determines by majority vote that the plan does not require approval it shall, without a public hearing and without unnecessary delay, endorse on the plan the words "Approval under the Subdivision Control Law not required" and shall forthwith notify the Town Clerk of its action. The Board may from time to time, in its discretion, authorize its chairman or other representative to endorse "Approval Not Required" plans on which a quorum of the Board has voted.

The Planning Board may add to such endorsement a statement of the reason approval is not required. The plan will be returned to the applicant, and the Planning Board shall notify the Town Clerk of its action.

If the Planning Board determines that the plan does require approval under the Subdivision Control Law, it will so inform the applicant and return the original of the plan. The Planning Board will also notify the Town Clerk of its action.

If the Planning Board fails to act upon a plan submitted for "Approval not required" endorsement within twenty-one

(21) days after its submission, or if the Board fails to notify the Town Clerk of its action on the plan within the said twenty-one days, the Board shall be deemed to have determined that approval under the Subdivision Control Law is not required and the Town Clerk shall issue a certificate to the same effect.

SECTION 5:00
PROCEDURES FOR THE SUBMISSION OF PRELIMINARY PLANS

5:01 General.

1. A Preliminary Plan of a subdivision may be submitted at the subdivider's option. The Preliminary Plan shall be submitted on the same date to both the Planning Board and the Board of Health for their discussion and approval, modification or disapproval. The submission of a Preliminary Plan will enable the subdivider, the Planning Board, the Board of Health, other municipal agencies and owners of property abutting the subdivision to discuss and clarify the problems of such subdivision before a Definitive Plan is prepared. Therefore, it is strongly suggested that a Preliminary Plan be filed for every subdivision.
2. The centerline of the proposed roadway and all property lot lines shall be adequately and accurately staked or flagged on the site sufficient for identification by the Planning Board members and town officials when site visits are made.

5:02 Submission.

A complete Preliminary Plan submission shall include, with the exception of the applicable fee the following: (a) the subdivision plan, (b) a completed copy of Form B (see Appendix B) and (c) all other information, documentation and correspondence required by these Rules and Regulations.

The applicant shall submit either by hand delivery or by registered mail on the same date (a) one complete submission to the Town Clerk (for date stamping) together with the applicable fee, (b) eight complete submissions to the Planning Board and (c) one complete submission to the Board of Health. The Planning Board shall file one complete submission with (a) the Board of Sewer and Water Commissioners, (b) the Conservation Commission, (c) the Board of Selectmen and (d) other Town agencies and/or departments for their review.

5:03 Filing Fee.

Each Preliminary Plan submitted to the Planning Board shall

be accompanied by a nonrefundable filing fee in accordance with Section 11:00, for which a receipt will be issued on request by the Town Clerk or Planning Board, whichever receives the submission directly. Checks shall be made payable to the Town of Williamsburg. A submission not accompanied by the filing fee is incomplete, and will not be accepted for consideration by the Planning Board until the fee is paid.

5:04 Contents.

1. The Preliminary Plan submission shall include at least three (3) alternative concepts for developing the parcel(s).
2. The Preliminary Plan shall be drawn at a scale of 1"=100' or greater on 24" by 36" sheets. Said plan shall show sufficient information about the subdivision to form a clear basis for discussion and for the preparation of the Definitive Plan. In addition, the plan shall show at least the following information:
 - a. The subdivision name, boundaries, true north arrow, date of submission, scale, legend and title "Preliminary Plan".
 - b. The names and addresses of the owners of record, the applicant and the names, addresses and professional seals of the registered Civil Engineer and Land Surveyor.
 - c. The names of all abutters and those owners of land separated from the subdivision only by a street, as determined from the most recent tax list.
 - d. Existing and proposed lines of street, proposed names of the latter, rights-of-way, easements, and any public or common areas within the subdivision. Purpose of easements shall be indicated.
 - e. Location, names and present width of streets bounding, approaching, or within reasonable proximity of the subdivision.
 - f. Location of natural waterways and water bodies within and adjacent to the subdivision.

- g. Boundary lines of all proposed lots with approximate dimensions and lot areas in square feet. (Note: every lot within a subdivision shall comply with applicable dimensional requirements of Williamsburg zoning).
 - h. The existing and proposed topography at a five (5) foot contour interval or better. Datum must be U.S.G.S Mean Sea Level. Major site features, such as existing stone walls, fences, buildings, large trees, rock ridges and ledges, swamps, historic features and wooded areas.
 - i. Whenever applicable and in a general manner, the proposed and existing storm drainage, sanitary sewer and water systems.
 - j. A sketch of the applicant's contiguous un-subdivided land, showing possible or contemplated development and street layout, if applicable.
- 3. When multiple sheets are necessary, match lines shall be used and referenced. An index plan graphically indicating the arrangement of said standard (24" x 36") sheets at a suitable scale shall be provided.
 - 4. During a discussion of the Preliminary Plan, the complete information required by the Definitive Plan, Section 6:00, may be developed.
 - 5. A locus or location plan at U.S.G.S. scale showing the subdivision and its location to the surrounding roadways and physical features.
 - 6. The applicant shall request, in writing to the Planning Board, any proposed waivers of a requirement, rule or regulation he/she/they may require.

5:05 Action by Planning Board.

After submission, the Preliminary Plan will be reviewed by the Planning Board, Board of Health, Chief of the Fire Department, Conservation Commission, and other municipal agencies and departments to determine whether it is in compliance with the design standards as set forth in these Rules and Regulations and with any additional requirements of the above mentioned Boards, municipal agencies and

departments.

Within thirty (30) days after the date of submission, the Board of Health, Board of Sewer and Water Commissioners, Conservation Commission and other municipal agencies and departments shall notify the Planning Board of their respective approval or disapproval of the Preliminary Plan, and if disapproved, shall list their reasons in writing.

Failure of the above mentioned Boards, Commissions, municipal agencies and departments to report to the Planning board within the prescribed time shall be deemed as their approval.

Within sixty (60) days after submission of the Preliminary Plan, the Planning Board shall approve, or approve with modifications, or disapprove said Preliminary Plan and in the case of disapproval, the Board shall state in detail the reasons for its disapproval.

The Planning Board shall file its decision with the Town Clerk and shall send a copy of said decision by registered mail to the applicant.

Approval of the Preliminary Plan by the Planning Board does not constitute approval of a subdivision, but does facilitate the procedure in securing approval of the Definitive Plan. In addition, such approval does not in any way authorize the owner to proceed with construction of roadways and/or other work in the subdivision.

A Preliminary Plan, whether approved or not, may not be recorded with the Registry of Deeds.

SECTION 6:00
PROCEDURES FOR THE SUBMISSION OF DEFINITIVE PLANS

6:01 General.

A Definitive Plan of a subdivision must be submitted to the Planning Board. Said plan shall be governed by the Subdivision Regulations in effect at the time of submission of such plan, or in effect at the time of submission of a Preliminary Plan, provided that a Definitive Plan evolved therefrom shall have been submitted to the Planning Board within seven (7) months from the date of submission of the Preliminary Plan.

A Definitive Plan shall also be governed by the zoning in effect at the time of submission of such plan or at the time of submission of a Preliminary Plan from which a Definitive Plan is evolved, in accordance with the appropriate provisions of Chapter 40A of the General Laws, as amended.

6:02 Submission General.

A complete Definitive Plan submission shall include, with the exception of the applicable fee, the following: (a) the subdivision plan, (b) a completed copy of Form C (see Appendix B) and (c) all other information, documentation, studies, statements, reports and correspondence required by these Rules and Regulations.

The applicant shall submit either by hand delivery or by registered mail on the same date (a) one complete submission to the Town Clerk (for date stamping) together with the applicable fee, (b) eight (8) complete submissions to the Planning Board and (c) one complete submission to the Board of Health. The Planning Board shall file one complete submission with (a) the Board of Sewer and Water Commissioner, (b) the Conservation Commission, (c) the Board of Selectmen and (d) other Town agencies and/or departments for their review.

6:03 Requirement 1 - Filing Fee.

Each Definitive Plan submitted to the Planning Board shall be accompanied by a non-refundable filing fee in accordance with Section 11:00. Checks for filing fees shall be made

out to the Town of Williamsburg. A Definitive Plan submission not accompanied by the correct filing fee is incomplete, and will not be accepted for consideration by the Planning Board until the correct fee is paid. Filing fees cover the Town's expenses for publication of hearing notices, mailing of other notices connected with subdivision plans, and professional review of plans when needed.

6:04 Requirement 2 - List of abutters.

List of abutters (see Appendix B, Form D). Name and mailing address of all abutters as they appear in the most recent tax list, including owners of land separated from the subdivision only by a street. The applicant shall obtain a certificate of the Board of Assessors that all abutters are listed.

6:05 Requirement 3 - Abutting Land.

A sketch plan showing a possible prospective street layout for any adjacent unsubdivided land owned or controlled by the owner or applicant of the subdivision and also showing topography, unless such a plan has already been submitted to the Planning Board during a preliminary submission.

6:06 Requirement 4 - Contents of Plan.

The Definitive Plan shall bear the seal of a Massachusetts Registered Land Surveyor and a Registered Professional Engineer. The plan shall be at a scale of one (1) inch equals forty (40) feet, unless otherwise specified by the Planning Board, and of a sheet size 24 inches by 36 inches outside dimensions. If multiple sheets are used, they shall be accompanied by an index sheet showing the entire subdivision, and all plans, layouts, profiles, cross sections and application shall be deemed to constitute the Definitive Plan. The Definitive Plan shall contain the following information:

1. The subdivision name, boundaries, the magnetic north arrow, date, scale, legend and title, "Definitive Plan".
2. The names of owners of record, the applicant and the Registered Land Surveyor and Registered Professional

Engineer, and official seals. Certification by the Surveyor and all surveying conforms to the technical standards for property surveyors of the American Congress on Surveying and Mapping shall appear on the plan.

3. Names and plan location of all abutters indicating limits of contiguous boundaries (within 200 feet of the boundary of the subdivision) and those owners of land separated from the subdivision only by a street. (Also shown on Form D, Appendix B).
4. Existing and proposed lines of streets, lots, rights-of-way, easements, and any public or common areas within the subdivision. (The proposed names of proposed streets shall be shown in pencil until they have been approved by the Planning Board). Purpose of easements shall be indicated.
5. Location, names and present widths of all streets abutting or within 500' of the subdivision. (These need not be shown on maps of the subdivision at any scale larger than 1"=100', but shall in every case be shown on the index map).
6. Location of natural waterways and water bodies within and adjacent to the subdivision.
7. Major site features, such as existing stone walls, fences, buildings, large trees (having diameter of 24" or greater at 4' above the ground and located within 40' of any road right-of-way line in the subdivision), rock ridges and ledges, swamps, flood plains, historic features, and wooded areas. The plan shall identify which of the above shall remain undisturbed.
8. Sufficient data, including lengths, bearings, radii, tangent distances, and central angles to determine the exact location, direction and length of every street and way line, lot line, and boundary line, and to establish these lines on the ground.
9. Location of all permanent monuments and bench marks identified as to whether existing or proposed. Bounds are required at all intersections of street lines, angle points and changes of curvature of street lines.

All bench marks shall be tied to and employ U.S.G.S. (United States Geological Survey) datum system or the Town control datum.

10. Boundary lines, areas in square feet, and dimensions of all proposed lots, with all lots designated numerically and in sequence.
11. Suitable space to record the action of the Planning Board and the signatures of the members of the Planning Board on each sheet of the Definitive Plan.
12. Existing and proposed topography (sufficiently differentiated) with two (2) foot contour intervals for the entire parcel, unless the Planning Board agrees that the natural surface of the ground may be adequately represented by contours with larger intervals or by figures of elevation. (The existing and proposed topographical information presented shall be sufficient to define the grading of each proposed lot and street).

Datum to be U.S.G.S. Mean Sea Level.

13. Where a storm drainage line discharges into a brook, stream, or drainage area, a profile will be shown of the brook, stream, or drainage area to determine condition, and proposed method of stabilization.
14. A street construction plan on a separate 24" x 36" sheet, horizontal scale 1" = 40', for each street in the subdivision showing exterior lines, roadway lines, partial lot lines, curb lines, intersection angles, points of tangency, and radii of curves. Also included on the street construction plan shall be location, size, type, elevations and invert, whenever applicable, of all pipes and conduits of the:
 - a. **Water Supply System**, including valves, stubs, gates, hydrants, and similar equipment;
 - b. **Storm Drainage System**, including manholes, pipes, culverts, catch basins, detention ponds, and appurtenant structures;

- c. **Sanitary Sewerage System**, including piping, manholes, stubs and appurtenant structures.
- 15. A Profile Plan on the same sheet located directly below and coordinated with the street layout plan, indicating existing profiles on the exterior and center lines (using light weight lines) and proposed profile on the center line (using heavy weight lines) of each proposed street, at a horizontal scale of 1" = 40' and a vertical scale of 1" = 4'. All elevations shall refer to U.S.G.S. Mean Sea Level datum. Profiles shall show existing and proposed street grades, rates of gradient on percentages, ground and proposed elevations at center line of each fifty (50) foot station, and grades of intersection streets and ways shall be clearly indicated.
 - 16. The Profile Plan shall show, whenever applicable, location of existing and proposed water, drainage and sanitary sewer lines, slopes and types (material and class) of all storm and sanitary sewer lines, invert, rim elevations and station of each manhole or catch basin.
 - 17. A typical cross section for the full width of the proposed right-of-way shall be shown in accordance with the "Street Cross Section", illustrated in Appendix A, showing foundation material, wearing surface, crown and width of traveled way, curbing, grass strips, sidewalks, utility locations, etc.

In certain cases, the typical cross section may impact the surrounding ground through extensive cut and fill areas. In these cases, plans showing cross sections every 50' along the proposed centerline of construction shall be submitted. Said cross sections shall be:

- a. submitted on 24" x 36" sheets,
- b. have minimum scale of 1" = 6' (both horizontal and vertical) and
- c. extend outside the limits of the right-of-way to the point where proposed and existing ground meet.

18. Construction details for catch basins, manholes, end-walls, head-walls, rip-rap, energy dissipaters, etc.
19. Whenever applicable, proposed layout and design of any and all parks, pools, or similar community improvements, including all water, drainage and electrical layouts, if any, designed to service such community improvements.
20. Locations of borings shall be shown on the plan with a numbering system corresponding to boring logs which will be submitted as part of the application (see Section 6:07.1).

6:07 Requirement 5 - Additional Submittals.

In addition to the above plans, submission of Definitive Plans must include the following:

1. **Boring Logs.** The purpose of borings is to assist the developer and the project's engineer in designing an appropriate roadway and related utilities based on existing water table and subsurface soil conditions (i.e., a clay subsurface might necessitate extra excavation and extra depth for gravel base; a water table near ground surface might necessitate the installation of sub-drains along the edge of the road, etc.). Borings shall (a) fall within the proposed street right-of-way, (b) be a maximum of 150' apart and (c) be at least 1' deeper than the deepest utility but in no case less than 5' deep. In case of a development located within the limits of any aquifer recharging the Town's wells, borings should provide enough information to facilitate the Town to determine the development's impact on subsurface water quality. The actual location at which each boring is made shall be shown on the plans. The borings shall be certified by a Massachusetts Professional Engineer.
2. **Hydrology Study and Drainage Calculation.** The applicant shall submit drainage calculations, including rational method and TR-55 or TR-20, showing (a) that any proposed drainage system has been designed according to the standards set forth in Section 8:17; and (b) any impact said drainage system would have on existing drainage systems downstream

from the proposed point of discharge. In addition, the applicant shall demonstrate that the drainage system of the proposed subdivision has been designed so that there will be no increased runoff into streams, ponds, wetlands and abutting properties.

3. **Sanitary Sewer Study.** The applicant shall submit calculations showing (a) that any proposed sanitary sewer system has been designed according to the standards set forth in Sections 7:12 & 8:18; and (b) any impact said sanitary system would have on existing sanitary systems downstream from the proposed point of discharge.
4. **Water Study.** The applicant shall submit a study certified by a professional engineer with demonstrated qualifications as a water consultant, showing that the chosen water system to be used within the subdivision will provide the latter with (a) adequate domestic water and (b) adequate fire flows. The standards for a water system will be determined by Sections 7:11 & 8:19 of these Regulations. The study will also show how to mitigate the impacts of the development on the water pressures in the surrounding area.
5. **Environmental Impact Analysis.** In order to insure the protection of the general public against any possible undesirable impact of the development on natural resources, the developer shall submit an analysis of any such matters of environmental concern, such as preservation of wetlands, surface and ground water quality and air quality. Said analysis shall be conducted by a professional who has demonstrated expertise in the environmental field.
6. **Development Impact Statement.** The developer shall submit an analysis of the impact of the proposed development by a qualified professional on (a) schools; (b) traffic; (c) water; (d) sewer; (e) municipal services such as public works, police, fire, libraries, recreation, etc. The standards used in calculating impacts should be carefully documented and fully referenced (see Appendix C). Each of the sections of said analysis (traffic, water, sewer, etc.) shall be forwarded by the Planning Board to the

appropriate Town departments for review. The purpose of said analysis is to assist the Town in assessing the cumulative impact of development to the Town. Regardless of the above, the Planning Board's decision shall be based on criteria set in Section 1:02.

7. **Easements.** All easements shall be shown on the subdivision plans with bearings and distances, and their purpose shall be clearly stated. The easements may be submitted by the Planning Board to the Town Solicitor, and his response shall be given in writing within thirty (30) days of the date of submittal.
8. **Homeowner's Association.** The applicant shall create a homeowner's association which will be responsible for the following:
 1. Ownership of all common land including but not limited to:
 - a. public roadways
 - b. public utilities (water, sewer, drainage, etc.)
 - c. detention ponds
 - d. easements
 - e. common spaces
 2. Maintenance of the above including but not limited to:
 - a. snow plowing, sanding and sweeping all roadways within the subdivision
 - b. repairing and reconstructing, whenever necessary, all roadways and utilities within the subdivision.
 3. Maintaining a bank account with sufficient funds to accomplish the above. The intent of this requirement is to insure that the association sets appropriate fees to its members so that the public infrastructure within the subdivision

continues to function properly. The fee schedule must be submitted to the Board for approval.

4. Appropriate documents, suitable for recording, establishing the association and its rules as stated above must be submitted to the Board for approval. Said documents may be forwarded by the Board to the Town Solicitor, who will respond in writing within thirty (30) days of the date for transmittal from the Board.

9. **On-Lot Sewage Disposal System.** Where sewage disposal is to be by individual on-lot sewage disposal system, the Definitive Plan shall be accompanied by a report, prepared by a Registered Civil Engineer, which includes the following:

- a. The results of percolation and deep hole soil tests performed on each lot, in accordance with Title 5 of the State Environmental Code and the Williamsburg Health Regulations.
- b. A map which locates the soil test sites on each lot.
- c. Other data, including topographic conditions, natural drainage patterns, soil characteristics, maximum ground water elevations.
- d. When on-site water supplies are to be used, the location of those supplies must be shown on a map along with proposed on-site sewage disposal systems, and any other sewage disposal systems, within 100 feet of the property line.
- e. A statement by a Registered Professional Engineer or Registered Sanitarian as to the suitability of the area for the installation of subsurface sewage disposal systems of the general type and size as indicated in the Massachusetts Environmental Code 314 CMR Title 5 - Department of Environmental Protection.

10. **Review by Board of Health as to the Suitability of the Land.** Prior to the public hearing on a Definitive Plan, the Board of Health shall report to the Planning Board and to the applicant its written approval or

disapproval of said plan. If the Board of Health disapproves the plan, it shall make specific findings as to which, if any, of the lots shown on the plan cannot be used for building lots without injury to the public health, and include such specific findings and the reasons therefore in its report and, where possible, shall make recommendations for the adjustment thereof. Failure of the Board of Health to report shall be construed as approval, and in such case the Planning Board shall note on the plan that approval of the Board of Health was by failure to report upon the plan. No plan which has been disapproved by the Board of Health shall be approved in the same form by the Planning Board.

11. **Wetlands Protection.** In accordance with Massachusetts General Laws Chapter 131, Section 40 and the Williamsburg Wetlands Protection By-Law, no person shall remove, fill, dredge, or alter any bank, beach, dune, flat marsh or swamp bordering on any existing creek, river, stream, pond, lake or any land under said waters or subject to flooding, without receiving a negative determination of applicability or an order of conditions from the local Conservation Commission and/or the Department of Environmental Protection (DEP).

Failure of the Conservation Commission to report to the Planning Board within forty five (45) days after receipt of a Definitive Plan, shall not exempt the Proposed plan from wetland regulations established pursuant to the M.G.L. Chapter 131, Section 40 and local ordinances.

12. **Construction Quantities.** The applicant shall submit a detailed estimate for all construction within the proposed roadway layout and/or public utility easements, certified by the project's engineer. Said estimate shall be based on the "Standard Specifications for Highway and Bridges", 1988 Edition, as amended, of the Commonwealth of Massachusetts and shall include:

- a. quantity, unit price and total amount for each construction item; and

- b. total amount for the cost of completing the project. This amount must include the estimated cost for the installation of all private utilities.

6:08 Submission of Revised Plans, Additional Materials, etc.

The applicant shall submit Form I (see Appendix B) each time additional material necessitating review by the Board is submitted, between the time of the original submission of the Definitive Plan and the Board's decision. The fee which will normally accompany said Form I shall be waived when the material requested by the Board, is in the form of additional information not included in Sections 6:02 through 6:07. All additional submissions shall be accompanied by a completed application Form I, which will automatically extend the Board's review by an additional sixty (60) days.

6:09 Review by Others.

Within ten (10) days after submission of a Definitive Plan, the Planning Board shall transmit one copy of the plan to the Board of Selectmen for review. The Board of Selectmen shall within forty five (45) days after receipt of the plan report in what respects, if any, the proposed streets and improvements would fail to comply with the standards for design, layout, construction and acceptance by the Town. The Board of Selectmen may also make such recommendations and suggestions to the Planning Board as, in the Selectmen's opinion, would improve the subdivision and its future development as an integral part of the entire town.

Within ten (10) days after submission of a Definitive Plan, the Planning Board shall transmit copies of the plan to other town boards and officials whose responsibilities may be affected by various aspects of the subdivision, for their review and comment. The Planning Board will give due regard to the views of these officials. Failure of said Boards and receipt of the plan shall be deemed as their respective approval of the subdivision. Failure of the Conservation Commission to respond within the prescribed time does not exempt the subdivision from wetland regulations (see Section 6:07.11).

If after receiving a subdivision application the Planning Board determines that it requires technical advice unavailable from municipal employees and departments to review the application, it may employ outside consultants. The Planning Board may, by majority vote, require that the applicant pay a reasonable review fee for the employment of outside consultants chosen by the Planning Board alone.

1. A review fee may be imposed only if:
 - a. the work of the consultant consists of review of studies prepared on behalf of the applicant, and not of independent studies on behalf of the Planning Board,
 - b. the board finds that an adequate review can not be performed by Town board members or employees,
 - c. the work is in connection with the applicant's specific project, and
 - d. all written results and reports are made part of the record before the Planning Board.
2. Before a fee is imposed:
 - a. the applicant shall be given five business days notice and opportunity to submit written comments relative to the invitation for bids or request for proposals,
 - b. the applicant shall be given five business days notice and opportunity to comment on all bids or proposals prior to the selection of the consultant and the award of a contract,
 - c. the applicant shall be given five business days notice and the opportunity to file an appeal of the selection of the outside consultant with the Selectboard. Grounds for said appeal are limited to written claims, with written documentation, that the consultant selected has a conflict of interest or does not possess the minimum required qualification in accordance with MGL Ch. 44, Section 53G.

If the Selectboard does not act within thirty days the Planning Board's decision shall stand.

- d. All time limits for action shall be extended during administrative appeals and processes detailed in paragraphs a, b, and c above.
- 3. Any invitation for bids or request for proposals shall indicate that award of the contract is contingent upon payment of a review fee. If the applicant fails to pay the review fee within ten days of receiving written notification of the execution of a contract with a consultant, the board may deny the subdivision approval.
- 4. Each review fee shall be deposited in a special account established by the Town Treasurer pursuant to MGL Ch. 44, Section 53G.
 - a. Funds from the special account may be expended only for the purposes described above, and in compliance with municipal procurement requirements.
 - b. Within sixty days of the completion of the project or of such time as the applicant formally withdraws the proposal, the applicant shall receive a final report of funds in the special account and shall be paid any unspent excess in the account, including accrued interest (if any).

6:10 Approval of Definitive Plan.

- 1. **Public Hearing.** Before approval, modification and approval or disapproval of a Definitive Plan is given, a Public Hearing shall be held by the Planning Board. Notice of the time and place of the hearing, and of the subject matter, sufficient for identification, shall be given by the Planning Board at the expense of the applicant by advertisement in a newspaper or general circulation in the Town of Williamsburg once in each of two successive weeks, the first publication being not less than fourteen (14) days before the day of such hearing.

A copy of said notice shall be mailed by registered mail to the applicant and to all owners of land abutting upon the subdivision including those owners separated from such land only by a street as appearing in the most recent tax list submitted by the applicant (see Appendix B, Form D). The applicant or his representative should be present at the hearing.

2. **Approval, Modification or Disapproval.** After the required hearing, but within the period specified in the Subdivision Control Law for the submission of the Definitive Plan, the Planning Board shall take action thereon. It may approve, modify and approve, or disapprove said plan, as provided by statute. Any approval of said plan by the Planning Board shall only be given on condition that the designated lots or land shall not be built upon or served with any utilities, such as septic tanks or cesspools, and drainage without prior consent of the Board of Health. The Planning Board shall endorse on the plan such conditions as set forth by the Board of Health and the lots and land affected by such conditions. The action of the Planning Board in respect to such plan shall be certified and filed with the Town Clerk and sent by registered mail, postage prepaid, to the applicant at his address as stated on the application (see Appendix B, Form C).

In the event of disapproval, the Planning Board shall state in writing its detailed reasons for disapproval. The Planning Board shall revoke its disapproval and approve of a plan which, as amended, conforms to these Rules and Regulations or recommendations. Any amended plans which are resubmitted for approval shall follow the same procedures as the original submission (Filing Fee, Public Hearing, etc.). Any amended plans submitted later than nine (9) months following the date of expiration of the appeal period or appeal(s) on the disapproval of the originally submitted plan must conform to the Subdivision Rules and Regulations and procedures (Filing Fee, Public Hearing, etc.) that are in effect at the time of the amended plan's filing.

Final approval, if granted, shall be endorsed on the reproducible drawings of the Definitive Plan by the signatures of the majority of the Planning Board, but not until (a) the statutory 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, or if appeal has been taken, not until the entry of a final decree of the court sustaining the approval of such plan and (b) all the conditions of Section 6:09.3 are met.

If approval of a Definitive Plan is by reason of the Planning Board's failure to act within the review period prescribed above, the twenty-day appeal period will begin on the first day after the expiration of the review period. If no appeal is filed during the appeal period, the Town Clerk shall issue a certificate stating that approval has become final. The said certificate shall be delivered by the Town Clerk to the applicant, and may be recorded.

Final approval of the Definitive Plan does not constitute the laying out or acceptance by the Town of streets within a subdivision. Such laying out or acceptance shall be by action of the Town Meeting upon recommendation of the Planning Board.

3. **Endorsement.** An approved, or approved with modifications, plan shall not be endorsed until after the mandatory twenty (20) day appeal period has elapsed and not until the applicant has:
 - a. Posted the necessary performance guarantee. The monetary value of said guarantee, using any method other than a covenant, shall be based on a revised construction quantity estimate (see Section 6:07.12) if conditional approval of the subdivision was given and if said approval changed the original quantities.

In addition, the monetary value of the performance guarantee shall be adequate to cover all costs the Town would incur to complete the project at the end of the expiration of said guarantee, including but not limited to construction costs at "prevailing" wages, record plans, street acceptance plans and legal costs.

- b. Made the necessary corrections, whenever applicable, on the plan, easements, master deeds, restrictive covenants, etc., if conditional approval was given to the satisfaction of the Planning Board.
- c. Presented to the Planning Board, and the Planning Board has subsequently approved, any additional information requested as part of a conditional approval.
- d. Paid the necessary inspection fee.
- e. Presented to the Planning Board for their approval, two sets of plans showing the complete natural gas, electrical, telephone and cable TV supply systems (including pipes, pumps, valves, gates, hand-holes, transformer padmounts and similar equipment.) Said plans will be accompanied by endorsements from the respective utilities that the plans have received their approval. In addition a street lighting system shall be shown for all street intersections, including the intersections of new subdivision roads with existing roads.
- f. Delivered to the Planning Board two (2) sets of reproducible drawings of the Definitive Plan with the necessary corrections as described in b above. After endorsements by the Board, the applicant shall record one set at the Hampshire County Registry of Deeds. The second set shall become part of the Board's records. In addition the applicant shall deliver to the Board six (6) sets of copies of the endorsed Definitive Plan.

- g. Failure of the applicant to meet the above requirements shall be full and sufficient reason to withhold endorsement.
- h. If the applicant fails to submit the required Performance Guarantees, easements and other documentation and the endorsement of the Plan by the Planning Board is delayed more than six (6) months after the expiration of the twenty (20) day appeal period, the Planning Board, on its own motion, shall exercise its power to codify, amend, or rescind its approval of the subdivision plan as a condition of said plan retaining the status of an approved plan.

4. **Performance Guarantee.** Before endorsement of the Planning Board's approval of a Definitive Plan of a subdivision, the applicant shall agree to complete the required improvements specified in Section 7:00 and 8:00 for all lots in the subdivision, such construction and installation to be secured in accordance with Section 81U of the Subdivision Control Law by one, or in part by the other, of the following methods which may from time to time be varied by the applicant:

- a. **Approval with Financial Performance Guarantees (Surety Bonds, Money, or Letters of Credit).** The applicant shall either file a surety company performance bond or provide a deposit of money or negotiable securities, including letters of credit, in an amount determined by the Planning Board (see Section 6:07.12 and 6:09.3a), to be sufficient to cover the cost of all or any part of the improvements specified in Sections 7:00 and 8:00 not covered by a covenant under "b" below, and to cover the costs of inspections, record plans, street acceptance plans, and legal work.

If financial performance guarantees are used, at least one lot in a subdivision which can be built on must be covered by a covenant (under paragraph b below) to insure that all work, including legal work, is completed.

Letters of Credit, surety bonds, and other financial performance guarantees must be drafted so that the only requirement that must be met for the Planning Board to draw on the letter is to notify the financial institution (grantor) that:

"We have incurred liability by reason of the failure of the applicant/developer/owner, within ninety days of the expiration of the letter, to complete the construction of their project (insert name of subdivision and plans) in accordance with the definitive subdivision plans and submittal, the subdivision approval and the Rules and Regulations Governing the Subdivision of Land in Williamsburg. The amount drawn, which may be more than required to complete the project, will be held in a segregated bank account until the work can be bid competitively and the bid awarded and paid for or until the contract for the work is otherwise let and the work paid for. Any excess over the cost of completing the work will be returned to the grantor."

Such bond, deposit of money or negotiable securities, shall be approved as to form, the surety or financial institution and manner of execution by the Planning Board.

- b. **Approval with Covenant.** Instead of filing a bond or depositing money, the applicant may fulfill a covenant (see Appendix B, Form G), executed and duly recorded by the owner of record, running with the land, that no lot in the subdivision shall be sold and no building erected thereon until such ways, services and, whenever applicable, temporary turnarounds are constructed and installed, and until record plans, street acceptance plans, and other required work are accepted by the Planning Board in accordance with these Rules and Regulations so as to adequately serve the lots. The developer shall record the covenant, endorsed Definitive Plan, and other appropriate documents at the Hampshire County Registry of Deeds (see Section 6:12).

6:11 Completion Time Schedule.

The Performance Guarantee, whether by bond, deposit of money, letter of credit, or covenant, as previously described herein, shall be contingent upon the completion of such improvements as required in these Rules and Regulations within a maximum period of two (2) years of the date of such bond, deposit of money, or covenant. There shall be at least a three (3) month period between the completion date of all improvements and the expiration date of any bond, deposit of money, or letter of credit. Said three (3) month period shall give the Town the opportunity to collect the financial performance guarantee so that it will be able to complete the necessary improvements in case (a) the developer is unable to do so; and/or (b) the Planning Board denies any request for an extension of time.

Upon written request from the applicant, the Planning Board may, at its discretion, grant an extension of time, and such agreement shall be executed and affixed to the financial performance guarantee or covenant.

In the case of a surety company bond, such an agreement for an extension shall not be effective until the surety delivers to the Planning Board a written statement that the surety agrees to the proposed alteration of the completion schedule and that such alteration shall not relieve or affect the liability of the surety company.

Failure to complete all improvements as required by these Rules and Regulations within the time allotted shall cause the Planning Board (a) to draw upon the performance guarantee (surety bond, deposit of money, letter of credit) in order to complete said improvements; and/or (b) schedule a Public Hearing in order to rescind approval of the subdivision in accordance with appropriate sections of Chapter 41, Section 81, of M.G.L.

6:12 Recording of Plan.

The Developer, with a representative of the planning Board present, shall, within ten (10) days after the Definitive Plan has been endorsed, record said plan, Form F, and, Conditions, public easements (plans and documents), restrictive covenants, master deeds, etc., at the Hampshire County Registry of Deeds, and in the case of registered land, with the recorder of the Land Court.

The cost of said recording shall be borne by the developer.

The applicant shall forward to the Board copies, certified by the Registry of Deeds, of the above mentioned plans and documents. In addition, the applicant shall obtain proof from the Town, that the latter has received said plans and documents.

6:13 Pre-Construction Conference.

Prior to construction, the developer, the project's engineer/surveyor and the contractor must meet with the Planning Board's agent and the Highway Superintendent to review the subdivision permit and conditions. The applicant must provide evidence that all required documents have been recorded.

Subsequent to said recording, the Planning Board shall file within seven (7) calendar days one (1) print of the Definitive Plan with the Building Inspector. Unless the Building Inspector has received such print, the Inspector shall issue no permit for the construction of a building on any lot within the subdivision, except upon receipt from the Planning Board of a copy of the Certificate of Performance (see Appendix B, Form H) releasing the lot in question (see also Section 10:06).

6:14 Release of Performance Guarantee.

1. **Procedures for Partial Release.** The subdivider may, upon partial completion and installation of required improvements in a subdivision, as specified in Sections 7:00 and 8:00 of these Rules and Regulations, the security for the performance of which was given by bond, deposit of money, letter of credit, or covenant, make formal application, in writing, to the Planning Board for partial release of his Performance Guarantee in accordance with the procedures set forth herein;
 - a. **Financial Performance Guarantee.** The amount of such bond, or deposit of money, or letter of credit, held may, from time to time, be reduced by the Planning Board. The applicant shall present to the Planning Board a list of all construction items performed and/or completed, said list to be based on Section 6:07.12, the subdivision approval, and the subdivision regulations in their entirety.

The amount to be reduced by the Planning Board shall be based upon prevailed construction costs at the time the application for reduction is made. The Planning Board shall withhold adequate funds to complete the project, as described in Section 6:09.3a and 6:09.4a, but shall withhold no less than five (5) percent of the original financial performance guarantee or five thousand (5,000) dollars, whichever is greater. The amount withheld shall be released under Section 6:13.

- b. **Covenant.** The subdivider may request a Release of Conditions (see Appendix B, Form H) for lots where the required improvements have been completed for that section of roadway beginning at any intersection with a Town road and abutting lots up through the last lot to be released. Lots may only be released if they abut the completed portion of the road. No partial release from the covenants will be approved if the total length of the roadway, including a temporary turnaround, abutting said designated lots, exceeds the Town's maximum allowable length for dead-end streets, as mentioned in Section 7:01.5, unless the Planning Board has already approved within the limits of the development a dead-end street exceeding said limits.

In the absence of financial performance guarantees, adequate covenants will be held to insure completion of the project, including record plans, street acceptance plans, site inspections, and legal work. In addition, a covenant on one lot which can be built on will be held until all work in the subdivision, including the signing of all necessary legal documents, has been completed.

2. **Procedures for Full Release.** The subdivider may, upon completion and installation of required improvements in a subdivision and the completion of record plans and street acceptance plans, as specified in these Rules and Regulations, make formal application, in writing, to the Planning Board for full release of any outstanding performance guarantee.

Before the Planning Board releases the full interest of the Town in said performance guarantee, the Planning Board shall:

- a. Obtain in writing from the registered professional engineer, responsible for the inspection of all phases of construction within the limits of the subdivision, a certificate of statement that all work required by these Rules and Regulations has been constructed in conformance with the approved construction plans.
- b. The applicant shall present the Planning Board with letters from the electric, telephone, gas and cable TV companies stating that their respective underground systems have been installed to their satisfaction.
- c. Obtain from the applicant a set of record construction plans. Said plans shall include, but not be limited to, all the information requested in Section 12:00, Record Plans.
- d. Receive from the applicant street acceptance plan or plans and necessary documents, as stated in Section 13:00, Acceptance Plans. Said plans and documents, after approval by the Planning Board shall be kept by the Planning Board until such time as the Town might accept the subdivision streets as town streets.
- e. The applicant may be required to execute an instrument, in a form approved by the Planning Board, transferring to the Town or to an approved public utility company, without cost, valid unencumbered title to all sanitary sewers, water mains, and appurtenances thereto, and other utilities constructed and installed in the subdivision of approved portion thereof, and conveying to the Town or to an approved public utility company without cost and free of all liens and encumbrances, perpetual rights and easements to construct, inspect, repair, renew, replace, operate and forever maintain such sanitary sewers, water mains and other utilities, with any manholes, conduits, and other appurtenances, and to do all acts incidental

thereto, in, through, and under the whole of all streets in the subdivision or approved portion thereof, and if any such sewers or water mains have been constructed and installed in land not within such streets, then in, through, and under a strip of land extending fifteen (15) feet in width on each side of the centerline of all such sewers and water mains. The Planning Board may require greater than fifteen (15) feet in width on each side of the centerline where it deems necessary.

- f. If the Planning Board determines that all improvements as shown on the endorsed Definitive Plan and all required plans and legal documents have been completed satisfactorily, it shall release all the interest of the Town in such performance guarantee and return the bond to the person who furnished the same, or release the covenant, by appropriate instrument, duly acknowledged, which may be recorded.
- g. If the Planning Board determines after inspection that said construction or installation has not been completed, or wherein said construction or installation fails to comply with these Rules and Regulations, the Planning Board shall send by registered mail to the applicant and to the Town Clerk the details wherein said construction or installation fails to comply with its rules.
- h. The applicant shall have thirty (30) days after receipt of such notice to correct all problems mentioned in the above. Failure of the applicant to finish all the necessary work within said thirty (30) days shall cause the Planning Board to draw upon the bond or deposit of money as mentioned below.
- i. Any such bond may be enforced and any such deposit may be applied by the Planning Board for the benefit of the Town of Williamsburg, as provided in Chapter 41, Section 81 of the M.G.L. upon failure of the performance for which any bond or deposit was given to the extent of the

reasonable cost to the Town of completing such construction and installation.

3. **Release of Lots from Covenant in Exchange for Bond or Deposit of Money.** The subdivider may request a Release of Lots from Covenant in exchange for a financial guarantee provided that:
 - a. The lots run consecutively and are released on both sides of the road simultaneously, beginning with the lots nearest any intersection of the subdivision road and a Town road.
 - b. The amount of financial guarantee shall be determined by the Planning Board, as described above.

6:15 Deviation from Approved Plan.

1. After approval of any Definitive Plan, the location and width of ways shown thereon, or any street or way subject to the Subdivision Control Law, shall not be changed unless the plan is amended in accordance with the provisions set forth in Section 81-W, Chapter 41, as amended, of the General Laws, and approved by the Planning Board. The Planning Board may require that a public hearing be held prior to its decision.
2. In the event the applicant desires to alter or change any portion of the approved subdivision, he shall:
 - a. Provide the Planning Board with a written statement requesting such alteration or change.
 - b. Provide the Planning Board with three (3) prints of the original Definitive Plan with the proposed changes drawn on said prints in red.
3. No change or alteration shall be permitted unless such change or alteration has been approved by the Planning Board
4. After approval of a change or alteration, the applicant shall cause such approved changes to be shown on the record plans (see Section 12:00).

5. Deviations from material and construction specifications shall not be allowed, except as specifically authorized by the Planning Board.
6. The Planning Board shall have thirty (30) days to respond to the applicant's request for said change or alteration.

SECTION 7:00
DESIGN STANDARDS

The Planning Board may disapprove a subdivision plan where, in the opinion of the Board, the existing surrounding municipal infrastructure (eg. street width and construction, sanitary sewer, public water, storm sewer, etc.) is sufficient and/or incapable of handling the additional volumes (eg. traffic, sewage, storm water, etc.) anticipated by the Board to be generated by the development.

Streets, sidewalks, water systems, sanitary sewers, storm drain systems, public and private utilities, and other infrastructure shall be constructed in accordance with this chapter and Section 8:00, Construction Standards.

7:01 Streets and Ways.

Streets and ways shown on the subdivision plan must comply with the following requirements:

1. **Location.**

- a. All streets and ways shall be designed so that in the opinion of the Board, they will provide safe vehicular travel. Due consideration shall also be given by the subdivider to the attractiveness and design of the street layout in order to obtain the maximum livability and amenity of the subdivision. As far as practicable, streets should also follow natural contours. Streets and lot lines shall be drawn so as to afford access to sunlight for energy efficient house siting and building wherever possible.
- b. Roads within a subdivision shall conform with any Master Plan that has been adopted by and is in effect within the Town.
- c. Provision shall be made, to the satisfaction of the Board, for the projection of streets or for access to adjoining property which is not yet subdivided or developed. A right-of-way from the end of all cul-de-sacs and dead-end roads to adjoining property must be part of the street layout and must be shown on street acceptance

plans and deeds unless there is compelling evidence, in the opinion of the Board, that the adjoining property will never be developed.

- d. Temporary dead-end or cul-de-sac streets shall conform to the provisions of alignment, width and grade that would be applicable to permanent dead-end or cul-de-sac streets.
- e. The developer shall make every effort to avoid the creation of dead-end streets and must connect the subdivision roadways to existing streets whenever possible.

2. **Alignment.**

- a. Horizontal and vertical alignment shall be in accordance with the standards as shown in Section 7:01.9.
- b. Local streets in residential subdivisions shall be laid out so that not less than two thirds (2/3) of the length of every street shall consist of curves, not including turnarounds at the ends of dead-end streets and no straight segment shall be longer than three hundred feet.

3. **Grade.** Grades shall be in accordance with the standards as shown in Section 7:01.9.

4. **Intersections.** Streets shall be laid out so as to intersect in accordance with the standards as shown in Section 7:01.9 and the following:

- a. Street and layout lines at all intersections between proposed streets or between a proposed and/or existing street, shall be rounded with a curve at each corner which has a property line radius of not less than thirty (30) feet.
- b. The centerline of all intersecting streets shall be a straight line from the point of intersection between centerlines for a distance of no less than one hundred (100) feet.

- c. On any street where the grade exceeds two (2) percent on the approach to the intersection, a leveling area with a maximum slope of two (2) percent shall be provided for a distance of not less than thirty (30) feet, measured from the nearest gutter line of the intersecting street.
- d. Streets entering opposite sides of another street shall be laid out either directly opposite each other or with a minimum offset of one hundred fifty (150) feet between their centerlines. This minimum offset shall also be observed whenever one or more streets entering opposite sides of another street are existing, whether located within or outside the boundary of the proposed subdivision.
- e. Streets entering the same side of another street shall be laid out with a minimum offset of one hundred fifty (150) feet between their centerlines. This minimum offset shall also be observed whenever one or more streets entering the same side of another street are existing, whether located within or outside the boundary of the proposed subdivision.

5. **Cul-de-Sac or Dead-End Street.**

- a. No street in a proposed subdivision shall be laid out in such a manner that an obstruction at any point on this street, or any other street with which it intersects, would isolate, without another point of exit, more than five hundred (500) feet of roadway as measured along the centerline of the road or roads. The length of the cul-de-sac shall be measured along the centerline of construction from its beginning to the center of the turnaround.
- b. Permanent cul-de-sac streets shall be provided with a turnaround at the end of the street having a minimum island radius of forty (40) feet and a property line radius of at least eighty (80) feet. The center of the cul-de-sac shall be on the centerline of construction (see Appendix A). In certain cases, based on existing topography,

the Planning Board might approve a hammerhead at the end of a street (see Appendix A).

- c. A permanent cul-de-sac island shall be constructed in lieu of paving the entire area of the cul-de-sac. The roadway pavement around the island shall have the same width as the roadway leading into the cul-de-sac (see Appendix A). The island shall be graded, seeded and/or appropriately planted with acceptable trees or shrubs, or left with natural tree growth. The maintenance of said island shall be the responsibility of the developer, his successors and assigns, or a homeowner's association.
- d. A temporary cul-de-sac, a hammerhead or temporary turnaround shall be allowed only where, in the opinion of the Board, it is essential to the reasonable development of the subdivision and where it is part of a street that eventually will be extended into adjoining property. The design of a temporary turnaround shall be satisfactory to the Board and clearly shown on the plan as temporary in nature and such property lines shall be those which would normally have been required or used without the turnaround.

Regardless of the above, no temporary cul-de-sac shall be allowed if the street length exceeds the limit set in these Rules and Regulations.

Layout of the turnaround beyond the normal street layout lines shall be in the form of an easement to the subdivision's homeowners association, when the street is extended into adjoining property, the easement shall become null and void.

6. **Street Cross Sections.**

- a. Cross sections shall be in accordance with the standards shown in Appendix A.
- b. Only the typical cross section need be shown on the Definitive Plan if the former conforms to the standard mentioned above. Any variation from the typical standard should be shown on the

construction plans at fifty (50) foot intervals.

7. **Right-of-Way Width.** The right-of-way width shall be sixty (60) feet. Greater width may be required by the Board when deemed necessary to accommodate commercial traffic.

8. **Paved Roadway Width.** The roadway width shall be based on the following criteria:

a. Projected traffic volume generated by the development based on ten (10) average daily trips (ADT) per dwelling unit (i.e., a two family house will generate 20 ADT).

b. The maximum number of vehicles based on the above mentioned ADT per dwelling unit, whether generated within the development (as in the case of a dead-end street) or outside of the development (as in the case of a through street) and passing any section of a roadway, will determine the width of the entire length of said roadway based on the standards shown below:

	<u>Pavement Width</u>
Type A: Street with total ADT less than 200	24'
Type B: Street with total ADT less than 500	26'
Type C: Street with total ADT less than 2,000	28'
Type D: Street with total ADT more than 2,000	30'

c. In establishing the proposed road width the developer shall also consider the future growth of the surrounding area.

- d. The centerline of the roadway shall coincide with the centerline of the right-of-way, unless otherwise approved by the Board.
- e. Greater widths may be required by the Board when deemed necessary to accommodate present and future traffic (including commercial vehicles). This may include widening and upgrading existing streets at close proximity to or adjoining the subdivision.

9. **Street Standards.**

	<u>Local</u>	<u>Collector</u>	<u>Major</u>
<u>Horizontal Alignment</u>			
Minimum radius of centerline	100'	300'	500'
Minimum tangent between reverse curves	50'	100'	150'
<u>Vertical Alignment</u>			
Minimum stopping sight distance at three and one half (3.5) feet above pavement	150'	200'	250'
<u>Grade</u>			
Maximum	9%	9%	6%
Minimum	.75%	.75%	.75%
<u>Intersection</u>			
Intersection angles (degrees)	90	90	90
Minimum sight distance (at stop controlled or obstructed view intersection)	300'	300'	550'
Minimum radius at edge of roadway	25'	30'	30'

7:02 Easements.

For municipal utilities (water, drain, sanitary) easements shall be thirty (30) feet wide, except that wider easements

may be required by the Board where necessary. Utilities shall be located as close as possible to the centerline of the easement.

7:03 Open Space.

Before approval of a plan, the Board may 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 area in relation to the land being subdivided and to the prospective uses of such land. The 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 years after its endorsement of the Definitive Plan.

7:04 Fencing.

The Board may require appropriate fencing whenever industrial/commercial areas abut residential areas.

7:05 Protection of Natural Features.

Due regard shall be shown for the protection of all natural features such as trees, watercourses, scenic points, historic spots and structures and similar community assets which, if preserved, will add attractiveness and value to the subdivision and to the community.

7:06 Guard Rails.

Guard rails shall be provided at points of hazard along the roadway such as fixed objects at the pavement edge, high fills, fills on sharp curves, along water courses, steep cliffs, along deep ditches and other similar locations as required by the Board.

7:07 Sidewalks.

Sidewalks shall be constructed between the traveled roadway and the layout line as follows:

1. Major streets: both sides
2. Collector streets: both sides, or as specified by the Board.

3. Local streets: one side, or as specified by the Board.

7:08 Wheelchair Ramps.

All sidewalks shall be handicapped accessible from the roadway at all intersections. Wheelchair ramps shall be designed and constructed according to the Commonwealth of Massachusetts Department of Public Works "Construction Standards" 1977 Edition, as amended.

7:09 Grass Plots and Trees.

1. The entire width of the right-of-way, except for roadway, curb, gutter and sidewalk, shall be finished with at least six inches of good quality loam, rolled and seeded with seed mix approved by the Planning Board.
2. No utility poles, transformers, signs or other obstructions shall be placed less than two feet from the edge of the paved roadway.
3. Where, in the opinion of the Planning Board, existing or proposed trees on the adjacent lot are not adequate, planting of street trees in the grass plot may be required. Species, size and planting specifications shall conform to current practices of the Town for street tree planting.

7:10 Water Supply.

1. **General.** It is the intent of the Town of Williamsburg that adequate water supply for both domestic use (meeting all State and local health requirements) and fire prevention must be made available within limits of any subdivision.
2. **Approved Water Systems.** Only the following shall constitute approved water systems:
 - a. For domestic use and/or fire protection a common, piped distribution system connected to the Town's existing public water supply.
 - b. For domestic use a private on-lot water system (well) for each lot.

- c. For fire protection cisterns, ponds or other approved storage facilities.

A subdivider may use any combination of the above to meet the Town's requirements.

- 3. **Common Distribution System.** Where a public water system is located within five hundred (500) feet of the subdivision, the subdivider shall connect to the public water system. Any portion of said system within the limits of the subdivision, which cannot provide a minimum working pressure of thirty-five (35) psi (this value reflects the Department of Environmental Protection's guidance for water systems) shall be grated and laid dry.

- 4. **Fire Prevention.** The criteria for approved water system (see 7:11:2a and 7:11:2c) capable of providing the subdivision with adequate fire flows are as follows:

- a. A piped, common distribution system must be capable of delivering the required fire flows shown below in gallons per minute (gpm), at twenty (20) pounds per square inch (psi), for a minimum of one (1) hour during periods of average daily demand. The table is based on the recommendations of the Insurance Association (Fire Protection Handbook) and the National Fire Code, Vol. 8, pg. 1231.

<u>Minimum distance between Structure</u>	<u>Fire flow (gpm) =</u>
over 99 feet	500
70 to 99 feet	750
11 to 69 feet	1000
10 or less feet	1500

Such a system must be designed to prevent the possibility of backflow infiltration into the municipal system during periods of fire demand.

- b. Cisterns, ponds or other approved storage facilities must be capable of supplying enough volume of water to fight fire for one hour based on the table shown above.

7:11 Sanitary Sewer System.

1. **General.** It is the intent of the Town of Williamsburg that, whenever possible, a developer must provide the subdivision with a sewer system, which will be connected to the Town's existing sewer collection system.
2. **Approved Sewer Systems.** Only the following shall constitute approved sewer systems:
 - a. Private on-lot septic systems for each lot.
 - b. A common, gravity sewer system, connected to the Town's existing sewer collection system.
3. **Common Sewer System.** Where a public sewer system is located within five hundred (500) feet of a subdivision, the subdivider shall connect the development to the public sewer, provided that can be accomplished without the aid of a pumping station.

7:12 Provisions for Groundwater Recharge.

To the extent it is feasible, storm water shall be recharged to groundwater rather than piped to surface water bodies or streams. Where the water table is not too high and the soil is relatively permeable, storm water drainage systems shall feature grassed swales, retention ponds and multi-use areas. Open drainage via grassed areas will be preferred as providing better filtration than pits and shafts. Retention ponds in which there is always some water will be preferred as more attractive and useful than detention basins in which water stands temporarily.

SECTION 8:00
CONSTRUCTION STANDARDS

All construction shall follow the Town of Williamsburg Standards, the Commonwealth of Massachusetts Department of Public Works (a) "Standard Specifications for Highways, Bridges and Waterways," 1988 Edition, as amended (to be referred hereto as the "Standard Specifications"), (b) "Construction Standards," 1977, as amended (to be referred to hereto as the "Construction Standards") and the following:

8:01 Borings.

The work shall consist of making soil-test borings, obtaining and preserving acceptable samples, preparing a report of the results obtained and delivery of the report and samples in conformance with appropriate provisions of Section 190 of the Standard Specifications and these Rules and Regulations. The report shall be prepared by a civil engineer registered in the Commonwealth of Massachusetts.

8:02 Construction (Stakes) Staking.

Developers shall employ, at their own expense, a professional engineer or a registered land surveyor to set all lines and grades in accordance with the provisions of Section 5:07 of the Standard Specifications.

8:03 Site and Earthwork.

1. All materials and construction methods used for roadway excavation and embankments shall conform to Section 100 of the Standard Specifications.
2. All natural features, such as large trees, watercourses, scenic points, historic plots, and similar community assets shall be preserved. It is the opinion of the Planning Board that this protection and preservation will add to the attractiveness and value of the subdivision.
3. The entire area within the right-of-way lines, except for trees and other vegetation intended to be preserved, shall be cleared and grubbed of all stumps, brush, roots, and like material. Trees intended to be preserved shall be protected by suitable boxes,

fenders, or wells as appropriate.

4. In a cut area all material shall be removed to sub-grade. All unsuitable material, such as peat, highly organic silt or clay, or any other material that is considered to be detrimental to the sub-grade, shall be removed and shall be replaced by bank-run gravel and be brought to proper compaction with a ten-ton roller.
5. Topsoil, defined as fertile, friable, natural material which has demonstrated vegetative growth and found on the site, can be used within the right-of-way, provided it conforms with the relative provisions of Section 751 of the Standard Specifications.
6. In fill areas the embankment shall be ordinary borrow specified and placed as in the relevant provisions of Section 150 of the Standard Specifications.
7. Before the ground base course is spread, the sub-grade shall be shaped to a true surface conforming to the proposed cross section of the road. Where fill is required, it shall be placed in layers not deeper than twelve (12) inches, except the last layer which shall not exceed four (4) inches in depth. The fill shall be ordinary borrow specified and placed as in the relevant provisions of Section 150 of the Standard Specifications. A tolerance of one-half (1/2) inch above or below finished sub-grade will be permitted, provided this difference is not maintained over fifty (50) feet and the required cross section is maintained.
8. The sub-grade shall be classified as follows:
 - a. Poor. Sub-grade soils which become quite soft and plastic when wet. Included in these are soils having appreciable amounts of clay, silt, and fine sand.
 - b. Medium. Sub-grade soils which retain a moderate degree of firmness when saturated. Included are such soils as fine sands, silty sands and sandy gravels with some silts and clays.

- c. Good to Excellent. Sub-grade soils which retain a substantial amount of their load-supporting capacity when saturated shall be classified as good. Included are clean sands and gravels free of detrimental amounts of plastic silts and clays. Sub-grade soils unaffected by moisture shall be classified as excellent. Included are clean and sharp sands and gravels, particularly those that are well graded.
9. Inspections shall be required upon completion of the sub-grade (see Section 10:03).

8:04 Pavement Structure.

1. The pavement structure shall be constructed in accordance with applicable provisions of Section 400 of the Standard Specifications and the following:
 - a. Sub-Base. The sub-base shall be gravel borrow meeting MI.03.0 Type a specifications, except that the top three (3) inches shall be screened or crushed gravel with a maximum stone size of one (1) inch. A tolerance of one-half (1/2) inch above or below finished sub-grade will be permitted, provided this difference is not maintained over fifty (50) feet and the required cross section is maintained. The gravel borrow shall be laid to a depth indicated below.
 - b. Binder Course. The binder course shall be asphalt concrete, in accordance with Section 460, Class I Bituminous Concrete Pavement Type I-1 (Top Course Mix). It shall be laid to a depth indicated below.
 - c. Surface Course. The surface course shall be asphalt concrete, in accordance with Section 460, Class I Bituminous Concrete Pavement Type I-1 (Top Course Mix). It shall be laid to a depth indicated below.
2. Required Depth of Pavement Sections:

	<u>Sub-grade Support Classification</u>		
	<u>Poor</u>	<u>Medium</u>	<u>Good-Exc</u>
Surface Course	1"	1"	1"
Binder Course	2"	2"	2"
Sub-base	18-24"	12-18"	12"

3. Inspections shall be required upon completion of each layer of sub-base and the binder and surface courses. (see Section 10:03).

8:05 Shoulders.

Shoulders shall be allowed in certain instances in place of sidewalks, curbs and grass strips, as shown in the street cross section (see Appendix A).

8:06 Curbs.

1. Curbing is required according to street classification.
 - a. Major Streets: curbs throughout; granite at intersections, bituminous concrete elsewhere.
 - b. Collector Streets: granite or bituminous concrete at intersections; bituminous concrete on slopes greater than 6%.
 - c. Minor Streets: curbs required only in special situations.
2. Granite curbing shall be Type VB.
3. Bituminous Concrete curb shall be Type 2 (6" reveal).
4. Bituminous Concrete curb around any cul-de-sac island, if required by the Planning Board, shall be "Cape Cod" type.
5. Granite curb inlets (Type VB) shall be build against all catch basin frames and shall be installed true to the horizontal and vertical alignment as shown on the plans.
6. All bituminous berms shall be placed on the bituminous binder.

7. The type and method of installation of bituminous berm, granite curb and granite curb corners shall conform to the relevant provisions of Section 470 and 500 respectively of the Standard Specifications.
8. Curbing at an intersection shall include the full length of the curve, plus six (6) feet of tangent in each direction. Curbs may be required on minor streets where the Planning Board deems that special conditions of topography, soils, drainage, alignment or high density make curbing essential. In all places where curbing is not required, the roadway edge and the adjoining grass plot or shoulder shall be so treated as to provide adequately for the carrying of surface runoff without undue soil erosion. This may require special design of gutters, shoulders, ditches, etc.

8:07 Driveway Approach Areas and Aprons.

The Planning Board may require the developer to construct certain driveway approach areas during the construction of the subdivision, in order to insure that certain physical characteristics, such as swales, steep side slopes, etc. do not get disturbed after the end of construction. Driveways shall be constructed in accordance with Town standards.

8:08 Sidewalks.

1. Sidewalk shall be constructed as follows:
 - a. Major Street: cement concrete, six (6) feet wide.
 - b. Collector Street: bituminous concrete, five (5) feet wide.
 - c. Local Street: bituminous concrete, four (4) feet wide.
2. Sidewalk sub-base shall consist of at least eight (8) inches of thoroughly compacted processed gravel.
3. All sidewalks shall conform to the material and construction methods as specified in Section 701 of the Standard Specifications.

8:09 Grass Strips.

1. Grass strips shall be provided on each side of the roadway, between the curb and the sidewalk, where sidewalks are required.
2. The finished grade of such grass strips shall have a slope of one-half (1/2) inch per foot towards the roadway. Where unusual physical land characteristics of topographic conditions exist, and where no sidewalk is to be constructed, the Planning Board may approve the construction of a grass strip of a greater slope with the finished slope not projecting above a plane sloped four (4) horizontal to one (1) vertical from the back of the curb.
3. No trees or other obstructions shall be placed or retained within the grass strip, except those approved by the Planning Board.
4. The top six (6) inches of grass strips shall consist of good quality loam extending to the right-of-way, screened, raked, and rolled with lawn grass seed applied in sufficient quantity to assure adequate coverage and rolled when the loam is moist. Spreading of loam and seed shall be in accordance with Sections 751 and 765 of the Standard Specifications.
5. The minimum width of any grass strip shall be seven (7) feet.

8:10 Side Slopes.

1. The area in back of the required grass strip, or behind the sidewalk, when one is required, shall be graded to a point where it coincides with the finished grade of abutting lots in such a manner that no portion thereof within the right-of-way lines of the street will project above a plane sloped four (4) horizontal to one (1) vertical.
2. The top six (6) inches of side slopes shall consist of good quality loam extending to the right-of-way, screened, raked and rolled with at least a 100-pound roller to grade. The loam shall be seeded with lawn grass seed applied in sufficient quantity to assure

adequate coverage and rolled when the loam is moist. Loam and seed shall be spread in accordance with Sections 761 and 765 of the Standard Specifications.

8:11 Street Name Signs.

A street sign shall be provided at every intersection of roads in a subdivision. The design, location and construction of street signs shall conform with the usual practice in the Town and shall be approved by the Highway Superintendent.

8:12 Monument and Markers.

1. Granite or reinforced concrete monuments four (4) feet in length, dressed to four (4) inches at the top with a three-eighths (3/8) inch drill hole in the center, and not less than four (4) inches square at the bottom shall be set to finish grade as shown on the plans.
2. No permanent monuments shall be installed until all construction which could destroy or disturb the monuments is completed.
3. Monuments shall be installed at all street intersections, at all points of change in direction or curvature of streets and at other points as shown in the Definitive Plan and where, in the opinion of the Planning Board, permanent monuments are necessary. A Massachusetts Registered Land surveyor shall certify in writing to the Planning Board that all monuments have been properly set in accordance with the final plan.
4. All monuments shall be installed prior to any release of the performance guarantee.
5. All monuments shall be set flush with the ground.

8:13 Landscaping, Street Trees, and Tree Belts.

1. Tree belts a minimum of six (6) feet wide shall be provided on each side of the roadway. Tree belts shall be between the curb or shoulder and the sidewalk, if required, or the edge of the right-of-way when there are no sidewalks. Trees shall be planted along the center line of the tree belt.

The finished grade of such tree belts shall have a slope of one-half (1/2) inch per foot toward the roadway. Where unusual physical land characteristics of topographic conditions exists, and where no sidewalk is to be constructed, the Planning Board may approve the construction of a tree belt of a greater slope with the finished slope not projecting above a plane sloped four (4) horizontal to one (1) vertical from the back of the curb or edge of the shoulder.

2. The top six (6) inches of tree belt shall consist of good quality loam extending to the right-of-way, screened, raked, and rolled with lawn grass seed applied in sufficient quantity to assure adequate coverage, rolled when the loam is moist. Spreading of loam and seed shall be in accordance with an industry standard acceptable to the Planning Board.
3. Street shade trees shall be on both sides of subdivision streets, within the right-of-way, but with a minimum setback of ten (10) feet from the edge of the pavement. There shall be one tree planted an average of every thirty (30) feet of street frontage along each lot and not less than two trees per lot. Any mature deciduous shade trees preserved may be applied toward this average.
4. Trees shall be mature deciduous trees or newly planted trees no less than three inch (3") caliper at time of installation. Clumping is permitted in order to frame or enhance a view.
5. Street trees shall be deciduous shade trees, including, but not limited to, those listed in the table below. No more than 35% of any one species shall be used throughout the subdivision, randomly distributed.
6. Street trees shall have a minimum caliper of three inches (3") measured six inches (6") above soil root ball. They shall be single-stemmed with a single, straight leader. All tree species must meet American Association of Nurserymen Standards for the types and sizes specified. These standards shall be included on the detail sheets.

7. The developer shall install on each lot the street trees specified on the approved plans prior to the issuance of the final Certificate of Occupancy. Trees must survive one year after planting prior to the release of warranty performance guarantees.
8. Planting operations and requirements for street trees shall be in accordance with the American Association of Nurserymen Standards for Planting and shall have a two (2) year growth warranty. These standards shall be indicated on detail sheets.

A Selection of Approved Street Tree Species

Botanical Name	Common Name	Notes
<i>Acer rubrum</i>	Red Maple	Low salt areas
<i>Acer saccharum</i>	Sugar Maple	In special circumstances, low salt, wide root zone areas
<i>Fraxinus pennsylvanica</i>	Green Ash	
<i>Gleditsia triacanthos</i> var. <i>inermis</i>	Thornless Common Honeylocust	
<i>Nyssa sylvatica</i>	Black Gum, Tupelo	Moist soils
<i>Quercus coccinea</i>	Scarlet Oak	
<i>Quercus robur</i>	English Oak	
<i>Quercus rubra</i>	Red Oak	Will tolerate poor, sandy soils
<i>Platanus x acerifolia</i>	London Plane Tree	
<i>Tilia cordata</i>	Littleleaf Linden	
<i>Ulmus Americana</i> 'Valley Forge'	Valley Forge Elm	
<i>Ulmus Americana</i> 'Princeton'	Princeton Elm	
<i>Ulmus parvifolia</i> 'Allee'	'Allee' Lacebark Elm	

8:14 Intersection Plantings.

No small trees, shrubs or plants that tend to obstruct visibility at street intersections shall be permitted within fifty (50) feet of the point of intersection of the

curb or exterior roadway lines along both sides of the corner lot at the intersection.

8:15 Underground Utility Systems.

All utility systems, public or private, shall be placed underground.

8:16 Utility Installation.

The installation of public utilities shall conform to the standards in the following sections:

1. The applicant shall employ, at his own expense, an engineer to set all lines and grades in a manner satisfactory to the Planning Board.
2. All utility lines shall be installed with the minimum cover as shown in Appendix A.
3. Sewers and drains shall be laid to true line and grade.
4. Electric, telephone, cable TV and fire alarm conduits shall be installed underground beneath the grass strip with a minimum cover, as shown in Appendix A.
5. Width of trench at the pipe or conduit shall be at a minimum equal to four thirds ($4/3$) diameter of the pipe or conduit, plus eighteen (18) inches.
6. Sheet piling shall be used, whenever necessary, in conformance with relevant provisions of Section 950 of the Standard Specifications.
7. Pipe and conduits shall be surrounded by six (6) inches of compacted screened gravel if set in earth, and twelve (12) inches if set in rock. In rock, clay, or peat excavation, trenches shall be excavated to a depth of twelve (12) inches or more below the bottom of any water pipe, storm drain, or sewer and filled with bank-run or select gravel, whichever is approved by the engineer.
8. Back-fill shall be compacted to ninety five (95) percent of the maximum dry density of the material as

determined by the American Association of State Highway Officials, Designation T-180D.

9. The water and sanitary sewer systems shall be tested and approved prior to installation of base course(s) and pavement.
10. All lot connections shall be installed to the right-of-way line, and marked or surveyed so as to be easily located in the future.

8:17 Drainage.

1. The construction of the drainage system, including methods of construction and quality of materials used, shall be in conformity with the Definitive Plan and Section 200 of the Standard Specifications.
2. The design capacity of the drains (closed drainage systems and pipes) shall be determined by the rational method, unless the engineer exhibits satisfactory evidence that another approach is more appropriate for the specific case. The engineer shall design the drainage system in accordance with natural drainage boundaries of the total contribution drainage area, using a minimum of a ten (10) year design frequency storm. Where, in the opinion of the Planning Board, flooding would produce property damage or a safety hazard, the design frequency storm shall be increased to twenty five (25) years. A one hundred (100) year design frequency storm shall be used for all bridge openings and major culverts, and detention or retention ponds. Drainage calculations shall be submitted with the Definitive Plan.
3. Drainage systems, including detention and retention, must be designed to prevent any increase in peak flows for the one (1) or two (2), ten (10), and one hundred (100) year Soil Conservation Service design storms. TR-55 (or TR-20 with all inputs and outputs shown) should be used for calculating drainage systems.
4. Pipe drains, where used, shall have a minimum diameter of twelve (12) inches and shall be laid to true line and grade.

5. Where feasible, stormwater should be directed to enter the nearest stream channel. Stormwater shall not be permitted to cross any roadway upon the surface but must be either piped underground or enter swales located parallel to and adjacent to the roadway pavement. Stormwater runoff shall not be permitted to flow upon the road surface for a longer distance than three hundred (300) feet before it enters the underground system. Catch basins shall be located on both sides of the roadway on continuous grades at intervals of not more than three hundred (300) feet, at all sags in the roadway, and near the corners of the roadway at intersecting streets.
6. Proper connections shall be made with any existing public drainage system within four hundred (400) feet of the subdivision, if the system has the capacity to absorb the flows from the project area. Where no public drain is within four hundred (400) feet, adequate provisions shall be made for the retention/detention of surface drainage within the boundaries of the subdivision.
7. Where open stream channels exist within a subdivision, adequate provision shall be made for properly maintaining them or for properly enclosing them if absolutely necessary. It is the Town's intent to preserve and maintain the natural features of such streams and any development should be planned accordingly.
8. Manholes and catch basins shall conform to Section 200 of the Standard Specifications and a typical detail showing materials, dimensions and construction details shall be shown on the Definitive Plan.
9. Iron casting for manhole frames and covers and catch basin frames and grates shall be in accordance with Massachusetts Department of Public Works Standards.
 - a. Manhole frames and covers shall be of good quality, strong, tough, even-grained cast iron per ASTM A48, Class 30, free from scale, lumps, blisters, sand holes and defects of any kind which render them unfit for the service for which they are intended. Before shipment, castings shall be given one coat of coal tar pitch varnish.

- b. Manhole covers shall have a diamond pattern, pickholes and the word "DRAIN" cast in 3-inch letters. Manhole frame and covers shall be LeBaron Foundry; Mechanics Iron Foundry; Neenah Foundry or equal. The following model numbers refer to Neenah Foundry products:

Manhole Frame and Cover - R-1720.

- c. Catch basin grates shall be square, type F, as manufactured by LeBaron Foundry Company, Box 746, Brockton, MA 02403, or other approved equal.
- 10. Drain manholes shall be located at every change in grade or direction of the drainage line, at catch basin connections, and shall not be placed further than three hundred (300) feet apart in a continuous system.
 - 11. All catch basins shall connect directly to drain manholes.
 - 12. All catch basins shall have three (3) foot sumps. All catch basins in the Town's Water Supply Protection District shall have gas traps with removable hoods.
 - 13. If roadway sub-drainage is required, rigid perforated PVC or ACCM pipe of appropriate size shall be used. Installation and materials shall conform to the provisions of Section 260 of the Standard Specifications and the sketch shown in Appendix A.
 - 14. If lot sub-drainage (i.e., foundation drains) is required, rigid six (6) inch PVC or ACCM pipe shall be used within the public layout. The method of connecting said sub-drainage to the public drainage system shall be approved by the Planning Board prior to construction.
 - 15. The maximum depth of any portion of the storm system shall be ten (10) feet.

8:18 Sanitary.

1. All gravity sanitary sewer main line pipe and service pipe shall be PVC pipe with a minimum rating of SDR 35. Minimum diameter of the main line pipe shall be 8 inches. Minimum diameter of service pipe shall be 4 inches.
2. Minimum slope for 8-inch diameter pipe shall be .005 ft/ft. Minimum cover shall be 4 feet to the top of the pipe. Minimum slope for 4-inch service pipe shall be 1/4 inch per foot. Minimum slope for all other pipe sizes shall be as determined by the Board of Water & Sewer Commissioners.
3. Manhole spacing - maximum of 300 feet and at the upstream end of the pipe.
4. Service connections made directly to manholes shall be provided with a channel in the manhole shelf.
5. Main line pipe and service connection pipe with a drop of greater than 2 feet at a manhole shall be provided with a chimney. Drops of less than 2 feet shall be avoided by installing the inlet pipe to meet the manhole outlet invert. Service drops shall be installed inside the manhole. Main line drops shall be installed outside the manhole.
6. A separate service connection pipe shall be provided for each house and/or building.
7. Pipe and fittings - per ASTM D3034.
8. Precast Concrete Manhole Sections - per ASTM C478 with the following exceptions:
 - a. Wall thickness (min)

5-inch for 48-inch diameter
6-inch for 60-inch diameter
7-inch for 72-inch diameter
 - b. Precast concrete barrel sections with precast top slabs and precast concrete transition sections

shall be designed for a minimum of H-20 loading plus the weight of the soil above at 120 pcf.

- c. Bases shall be monolithically constructed with a 6-inch extended base.
- d. Knock out panels shall be provided in precast manhole sections at the locations shown on the Drawings. They shall be integrally cast with the section, 2 1/2-inch thick and shall be sized as shown on the Drawings. There shall be no steel reinforcing in knock out panels.
- e. Side wall height of the base section shall be a minimum of 12 inches above the top of the pipe coming into the manholes.
- f. Exterior of all sections shall be coal-tar epoxy coated.
- g. Channel invert height = .75 pipe diameter.
- h. Step spacing shall be 12 inches.

9. Brick Masonry.

- a. Brick.

Bricks for the channels and shelves - per ASTM C32, Grade SM.

Bricks for building up and leveling manhole frames - per ASTM C32, Grade MS.

Poured concrete inverts will not be allowed.

- b. Mortar - one part Type II Portland cement per ASTM C150 to two parts sand to which a small amount of hydrated lime not to exceed 10 lbs. to each bag of cement shall be added.
- c. Sand - Washed, cleaned, screened, sharp and well graded with no grain larger than will pass a No. 4 sieve, free from vegetative matter, loam, organic or other materials of such nature or of such quantity as to render it unsatisfactory.
- d. Hydrated lime - per ASTM C207.

10. Manhole Frame and Cover.

- a. Manhole frames and covers shall be of good quality, strong, tough, even grained cast iron per ASTM A48, Class 30, free from scale, lumps, blisters, sand holes and defects of any kind which render them unfit for the service for which they are intended. Before shipment, castings shall be given one coat of coal tar pitch varnish.
- b. Manhole covers shall have a diamond pattern, pickholes and the word "SEWER" cast in 3-inch letters. Manhole frame and covers shall be LeBaron Foundry; Mechanics Iron Foundry; Neenah Foundry or equal. The following model numbers refer to Neenah Foundry products:

Manhole Frame and Cover - R-1720.

11. Jointing Precast Manhole Sections.

Tongue and groove joints of precast manhole sections shall be sealed with either a round rubber "O"-ring gasket conforming to ASTM C443, or a preformed flexible joint sealant.

12. Manhole Rungs.

Manhole rungs shall be either of cast aluminum alloy 6061-T6, drop front design, 14-inches wide with an abrasive step surface or of steel reinforced copolymer polypropylene plastic. Manhole rungs shall conform to OSHA requirements.

13. Pipe Connections to Manhole.

P.V.C. pipe connections may be accomplished in the following way:

A waterstop gasket and stainless steel clamp shall be attached to the pipe prior to grouting. Void between pipe and manhole wall inside manhole shall be filled with non-shrink waterproof grout after the pipe is set.

14. Manhole Chimney.

- a. Pipe and fittings for manhole chimney shall be of the same size and material as the influent line.
- b. Concrete for manhole chimney encasement shall be 3,500 psi.

15. Dense Graded Stone Borrow for PVC Pipe Bedding.

Crushed stone for the pipe bedding and haunching shall be a dense graded mixture and conform to the following gradation requirements:

<u>Size of Sieve</u> <u>(Square Openings)</u>	<u>% by Weight Passing Through</u>	
	<u>Minimum</u>	<u>Maximum</u>
5/8"	100	100
1/2"	85	100
3/8"	15	45
Pass #4	0	15
Pass #8	0	5

All bedding and haunching shall be compacted to a minimum of 95% of Maximum Dry Density as determined by a Standard Proctor Compaction Test.

16. PVC sewer pipe shall be installed on a minimum 6" thick foundation of crushed stone, and uniformly supported throughout the entire length from the crushed stone foundation to the springline of the pipe with crushed stone for the entire width of the trench. Crushed stone for 4" house connection pipe shall extend from the stone foundation up over the 4" pipe at least 6" for the entire width of the trench.

17. Manholes shall be installed:

- a. Manhole shall be constructed to the dimensions shown on Drawings and as specified in these Specifications. All work shall be protected against flooding and flotation.
- b. Precast concrete barrel sections shall be set so as to be vertical and with sections in true alignment with a 1/4-inch maximum tolerance to be allowed.

Precast sections shall be installed in a manner that will result in watertight joint.

- c. Holes in concrete barrel sections shall be plugged with a non-shrinking grout and finished flush on the inside.

18. Manhole Rungs shall be installed:

- a. Aluminum manhole rungs shall be cast into precast sections, on 12-inch centers, by the manufacturer that casts the precast sections. Those parts of the rungs which are embedded shall receive a heavy coating of zinc chromate or other approved paint.
- b. Steel reinforced copolymer polypropylene plastic steps shall be press fitted by hand driven hammer into preformed holes in cured precast sections of 12-inch centers, by the manufacturer that casts the precast sections.

19. Brickwork shall be installed:

- a. Channels and shelves shall be constructed of brick. The brick channels shall correspond in shape with the lower half of the pipe. The top of the shelf shall be set at the elevation of the crown of the highest pipe and shall be sloped 1-inch per foot to drain toward the flow through channel. Brick surfaces exposed to sewage flow shall be constructed with the nominal 2-inch x 8-inch face exposed (i.e., bricks on edge).
- b. Manhole covers and frames shall be set in a full mortar bed and bricks, a maximum of 12 inches thick for conical tops and 6 inches thick for flat top sections.

20. Dampproofing shall be installed:

Outer surfaces of precast manholes shall be given two coats of bituminous dampproofing at the rate of 30-60

sq. ft. per gallon in accordance with manufacturer's instructions.

21. Chimneys shall be installed:

- a. Construct chimney by carefully placing the pipe and fittings forming the manhole chimney so that the 90° bend at the bottom of the chimney is at the elevation shown on the Plans.
- b. The entire chimney from the bottom of the concrete base of the manhole to the centerline of the sewer line shall be encased in a concrete envelope which shall extend a minimum of eight inches on all sides of the chimney pipe. The concrete envelope shall extend to the exterior wall of the manhole.

22. Relationship to Water Mains - Per TR-16.

23. Testing - Air/Water, for Pipelines. Per TR-16.

24. Vacuum Test for Manholes - Gravity Lines (not hydrostatically tested).

- a. After manhole has been constructed, the Contractor shall conduct a Manhole Acceptance Test using the following vacuum test procedure:

Plug all lift holes with an approved no-shrink grout.

Plug all pipes entering the manhole, taking care to securely brace the plug from being drawn into the manhole.

The test head shall be placed at the inside of the top section and the seal inflated in accordance with the manufacturers' recommendations.

Draw a vacuum of 10 inches of mercury and shut off the vacuum pump. With the valves closed, the time shall be measured for the vacuum to drop to 9 inches. The manhole shall pass if the time is greater than:

1 min. 0 sec. for 0'-10' deep manholes
1 min. 15 sec. for 10'-15' deep manholes
1 min. 30 sec. for 15'-25' deep manholes

If manhole fails initial test, necessary repairs shall be made with non-shrink grout. Retesting shall proceed until a satisfactory test is obtained.

25. Allowable Deflection Test - Go/No-Go Gauge

- a. Pipe deflection measured not less than ninety days (90) after the backfill has been completed as specified shall not exceed five (5.0) percent.
- b. Deflection shall be measured with a rigid mandrel (Go/No-Go) device cylindrical in shape and constructed with a minimum of nine or ten evenly spaced arms or springs. The mandrel shall be hand pulled through all sewer lines.
- c. Any section of pipe not passing the mandrel shall be uncovered at the Contractor's expense and the bedding and backfill replaced to prevent excessive deflection. Repaired pipe shall be retested.

8:19 Water.

1. Ductile Iron Pipe and Fittings-General.

Ductile iron pipe and fittings shall meet as, a minimum, the following American Water Works Association (AWWA) standards as most recently amended:

AWWA C104. Cement-Mortar Lining for Ductile Iron Pipe and Fittings for Water.

AWWA C110. Ductile Iron and Gray Iron Fittings, 3 In. through 48 In., for Water and Other Liquids.

AWWA C111. Rubber Gasket Joints for Ductile Iron and Gray Iron Pressure Pipe and Fittings.

AWWA C150. Thickness Design of Ductile Iron Pipe.

AWWA C151. Ductile Iron Pipe, Centrifugally Cast in Metal Molds or Sand Lined Molds, for Water and Other Liquids.

AWWA C153. Ductile Iron Compact Fittings, 3 In. through 12 In., for Water and Other Liquids.

2. Pipe.

All ductile iron pipe shall be Class 52 ductile iron pipe in accordance with AWWA C150 and C151 and shall have push on joints, furnished in accordance with AWWA C111 unless otherwise specified or shown on the drawings.

All pipe shall be lined with a double thickness cement mortar in accordance with AWWA C104, and shall be asphalt seal coated twice. Outside of pipe to be bituminous coated in accordance with AWWA C151. Inside seal coat to be such as not to impart taste or odor to the water contained therein.

Each pipe shall have cast on it or stamped on it by means of a hand dye stamp, the maker's name or mark, and the year in which the pipe was cast. Also, the weight, thickness class and sampling period shall be painted on each pipe.

3. Fittings.

All fittings shall be new, American made, and in accordance with AWWA C153 or AWWA C110, Class 350, unless otherwise specified or modified herein. No foreign made fittings will be accepted.

All fittings, except sleeves, caps and plugs shall be lined with a double thickness cement mortar in accordance with AWWA C104, and shall be asphalt seal coated twice. Outside of fittings to be bituminous coated in accordance with AWWA C151.

Inside seal coat to be such as not to impart taste or odor to the water contained therein.

All fittings shall have mechanical joints in accordance with AWWA C111, except as provided for in AWWA C153.

The branch of trees for hydrants or stubs shall be mechanical joint anchoring trees.

All bends shall be provided with integrally cast lugs for attachment of harnessing, strapping, and other types of restraint.

4. Sleeve Type Couplings (Flexible Connection).

Sleeve type couplings shall be equal to Style 153 cast couplings for cast iron pipe and asbestos cement pipe, made by Dresser Mfg. Div., Bradford, Pennsylvania or approved equal. The couplings shall be furnished with the pipe stop removed. Couplings shall be provided with plain, Grade 27, rubber gaskets and with black, steel, track-head bolts with nuts.

When buried in the ground, the bolts and nuts shall be corrosive resistant.

To ensure correct fitting of pipe and couplings, all sleeve type couplings and accessories shall be furnished by the supplier of the pipe.

5. Valves, Hydrants and Appurtenances- General.

Valves, hydrants and appurtenances shall meet, on a minimum, the following American Water Works Association (AWWA) standards as most recently amended:

AWWA C111. Ductile Iron and Gray Iron Fittings, 3 in. through 48 in., for Water and Other Liquids.

AWWA C500. Gate Valves for Water and Sewerage Systems.

AWWA C502. Dry Barrel Fire Hydrants.

6. Gate Valves.

Gate valves shall comply with AWWA C500 and shall be

rated for 200 psi minimum working pressure and a minimum 300 psi test pressure.

Valves shall be of the iron body, bronze mounted, solid wedge resilient seat, non-rising stem type, fitted with "O-Ring" seals. Valves shall have mechanical joints equal to AWWA C111. All external nuts and bolts shall be stainless steel.

The operating nut shall be standard AWWA 2 inch square and shall be attached by a nut; pinning is not acceptable. Gate valves shall OPEN to the LEFT or counter-clockwise.

All ferrous parts of the valves, except finished or bearing surfaces, shall be given two coats of asphaltum varnish. After the valves are assembled and tested, a third coat shall be free of any asphalt solution.

The design of the valve shall be such that the seal plate can be fitted with "O" rings while the valve is under pressure in a fully open position.

Gate valves shall be as manufactured by Waterous, M & H, Kennedy, American-Darling, or approved equal.

7. Tapping Sleeves and Valves.

The tapping sleeves shall be mechanical joint where possible or of the bolted sleeve type caulked with a poured lead connection to the existing mains and flanged end outlets for connection to the tapping valves. The outlet flanges shall conform to the 125 pound American Standard. The tapping sleeve and valve shall have an oversized opening to allow use of full size cutters. Tapping sleeve pressure rating shall be a minimum 200 psi. The tapping valve shall conform to the specifications for Gate Valves.

8. Valve Boxes.

Unless otherwise specified or required, each buried valve shall be provided with a valve box. Valve boxes shall be of tough even grain cast iron and of the

adjustable, slip, heavy pattern type with bell type bottoms. They shall be so designed and constructed as to prevent the direct transmission of traffic loads to the pipe or valve.

The upper or sliding section of the box shall be provided with a top flange having sufficient bearing area to prevent undue settlement. The lower section of the box shall be designed to enclose the operating nut and stuffing box of the valve and shall have a minimum 8 inch inside diameter and maximum 9 inch diameter. Valve boxes shall have a minimum 6 inch overlap between top and bottom sections.

The valve boxes shall have a nominal inside diameter of 5 inches and the lengths shall be as necessary for the depth of the valves with which the boxes are to be used.

Covers shall be close fitting and substantially dirt tight. The top of the cover shall be flush with the top of the box rim. The word "water" shall be cast in the top cover.

9. Hydrants.

Hydrants shall open by turning the operating nut to the LEFT or counter-clockwise and shall be marked with an arrow and the word "open" to indicate the direction to turn the stem to open the hydrant.

Hydrant seat ring shall be bronze to bronze. All internal parts shall be removable through the bonnet. Seals shall be of the dual o-ring type and bonnet shall be provided with leak free lubrication. Hydrants shall employ a nylon anti-friction thrust bearing to reduce operating torque and it shall not require lubrication. Stem stop nut shall protect components below from excess torque. Hydrants shall be able to be rotated to 360 degrees. Nozzles shall be threaded in and pinned. They shall have a positive closing, self cleaning drain valve and drainage area shall be completely bronze or brass lined.

After being thoroughly cleaned, all iron work set below ground shall be painted with two coats of

asphalt varnish specified in AWWA C504. All iron work left above ground shall be shop painted with two coats of paint of quality and color to correspond to the present standard of the Owner.

Hydrants shall conform to National Standard Specification sizes in threads and nuts. Caps shall have retainer chains and rubber gaskets. Hydrants shall be traffic models (break flange) and shall have a minimum bury of 5 feet - 6 inches.

Hydrants shall be the make and model used by the Williamsburg Water Department at the time of construction. (The Water Department currently uses a Kennedy hydrant, but would like to maintain the flexibility of changing their standard and having the developer meet the standard being used at the time of construction).

10. Water Services- General.

All work and materials shall be as specified herein and as required and approved by the Town Water Department. All brass goods shall be as manufactured by the Red Hed Manufacturing Company or approved equal.

11. Water Service.

All pipe for Water Services shall be seamless copper water tubing and shall conform to the provisions of ASTM B-88, Type K annealed (soft) AWWA Specification 7S-CR or Federal Specification WWT-799.

12. Corporation Cocks.

Corporations shall have a C.C. thread with compression fittings.

13. Fittings.

Unless otherwise approved, only compression end type fittings will be used except where connections to existing services require special fittings.

14. Curb Cocks.

Curb cocks shall open to the LEFT or counter-clockwise. Curb cocks shall have no "waste". Curb cocks shall have a preattached operating rod.

15. Service Boxes.

Curb boxes shall be non-screw Buffalo type, tar coated, cast iron, sliding type arch pattern base with inlaid covers. Covers shall be held in place with bronze bolts and the word "Water" shall be cast into the cover. Curb boxes shaft shall have a minimum inside diameter of 2-1/2 inches.

16. Water System Installation.

- a. The water main shall be designed with a minimum depth to the top of the pipe of 5 feet.
- b. Air release shall be provided at all local high points. Air release device shall consist of either a) a 3/4" corporation, copper tubing, curb stop and box, and a second box for enclosure of the discharge end of the copper tubing; or b) fire hydrant assembly.
- c. Fire hydrants shall be spaced a maximum of 500 feet and at the end of a main.
- d. Individual service connections (3/4" minimum) shall be provided for each house and/or building.
- e. All water mains shall be a minimum of 8 inches in diameter and shall be ductile iron pipe.
- f. All service connections shall be copper tubing from the main to the building.
- g. Ductile iron pipe joints shall be assembled with bronze wedges to ensure electrical continuity. A minimum of 2 shall be provided for each joint, including mechanical joints.
- h. Whenever possible, solid sleeves shall be used. Alternatively, the use of a cast coupling is acceptable.

- i. The Curb Stop box cover shall be held in place with a brass pentagon bolt.
- j. All pipe shall be disinfected in accordance with AWWA C651 and tested prior to placement into service.
- k. The allowable leakage for rubber joints shall be based on the formula:

$$L = (ND) / (3,700P)$$

8:20 Other Utilities.

Materials and construction methods shall be in accordance with the requirements of the involved utility company after said requirements have been approved by the Planning Board and the Highway Superintendent.

8:21 Cleaning Up.

The entire area must be cleaned up within thirty (30) days of the completion of construction so as to leave a neat and orderly appearance free from debris and other objectionable materials. All catch basins shall be properly cleaned.

8:22 Easements.

1. **Utility Easements.** Utility easements shall be provided wherever utility lines must be located outside the lines of roadways. Such easements shall be a minimum of thirty (30) feet wide. A utility line shall be located at the center of the easement.
2. **Drainage Easements.** Where a subdivision is traversed by a watercourse, drainage way, channel or stream, the Board may require provision of a storm water easement or drainage easement of adequate width to conform substantially to the high water lines of such watercourse, drainage way, channel or stream and to provide for construction or maintenance of drainage structures and systems, or other purposes.

3. **Slope Easements.** Where a cut or fill embankment incidental to the road in a subdivision extends beyond the sideline of the road, the Board may require a slope easement to permit access to the whole embankment by those responsible for the maintenance of the roadway.

SECTION 9:00
REQUIRED IMPROVEMENTS FOR AN APPROVED SUBDIVISION

All streets, underground utilities, shoulders, curbing, sidewalks, plantings, side slopes, street signs, monuments and markers, drainage systems, sewerage systems, easements, e.t.c., which comprise a subdivision, shall be installed and/or obtained by the subdivider. Record Plans and Street Acceptance Plans are a part of the required improvements. All of the above shall be prepared, obtained or installed in accordance with these Rules and Regulations.

SECTION 10:00
ADMINISTRATION AND INSPECTION

10:01 General.

1. The developer shall retain the services of a professional engineer registered in the Commonwealth of Massachusetts, who will administer and inspect the subdivision. The engineer shall certify in writing to the Board, that the subdivision has been built in accordance with the approved plans and the Board's Order of Conditions. The engineer's certification shall be based upon the partial administration and inspection schedules mentioned in Section 10:02 and 10:03 below.
2. CONSTRUCTION SHALL NOT COMMENCE ON ANY PORTION OF THE SUBDIVISION UNTIL THIS CONDITION HAS BEEN MET. Prior to the commencement of construction, the developer, the project's engineer and the designated contractor must meet with the Planning Board's agent and the Town's Highway Superintendent for a preconstruction meeting. At that time, the developer must provide evidence that all required plans and documents have been recorded at the Hampshire County Registry of Deeds.
3. The developer shall notify in writing the Highway Superintendent and the Planning Board, two (2) days in advance of the date of commencement of construction and subsequent phases of construction such as but not limited to the installation of utilities, roadway excavation, pavement installation, etc.

10:02 Partial Administration.

The engineer (see Section 10:01:1) shall perform the following:

1. Review all material submissions by the contractor and advise the Board as to their conformance to the Town standards.
2. Review all submissions dealing with (a) requests to change approved plans and/or construction materials and (b) changes in the performance guarantee such but

not limited to letter of credit decreases. Submit recommendations to the Board in writing.

3. Review field changes requested by the contractor. Submit recommendations to the Board in writing.
4. Certify to the Board the completeness and accuracy of record plans and tie-cards.
5. Advise the Board in regard to the contractor's performance and ability to adhere to the approved time table.
6. Provide daily log sheets to the Board clearly showing the extent of the inspections.

10:03 Inspections.

The engineer (see Section 10:01:1) shall perform the following:

1. Periodic unscheduled inspections of all underground utility installations. The frequency and duration of these inspections must be such that the inspector is able to state and certify that the utilities were installed properly.
2. Visual inspection of the complete storm drain system.
3. Witness, review, advise and certify to the Board the following utility tests:
 - a. Water System. Pressure test, fire flow test (see Sections 7:11 & 8:19).
 - b. Sanitary Sewer System. Pressure test, "go-no go" test (see Sections 7:12 & 8:18).
4. Evaluation of the roadway/sidewalk subgrade to determine the need for special treatment such as filter fabric, subdrains, extra excavation, etc.
5. Final elevation check of subgrade every fifty (50) feet along the centerline of construction.
6. Periodic unscheduled inspections of the gravel base.

7. Final elevation check of bank run, screened and processed gravel.
8. Continuous inspection of the bituminous concrete installation (both roadway and sidewalk).
9. Periodic unscheduled inspections of bituminous berm and granite curb installation.
10. Periodic unscheduled inspections of detention ponds, drainage ditches, rip-rap, headwalls, loam and seed, street signs, etc.
11. Final inspection of all water gates and service boxes.
12. Final inspection of all manholes and catch basins.
13. Preparation of final punch list.
14. Final inspection of subdivision and final written report to the Board.

10:04 Additional Requirements.

1. After the installation of the complete water and sanitary systems and prior to the placement of any gravel on the proposed roadway, the developer shall present to the Board ties to fixed and easily identifiable objects and elevations (whenever applicable) on 4"x6" cards of all appropriate components of said systems (such as bends, tees, gates, corporations, curb stops for water systems and wyes and ends of all sanitary sewer services), so that the Town will be able to physically locate said components in the future. The cards are to be prepared by the project's engineer. Upon approval of the tie cards, the Board shall notify the developer in writing to proceed with construction.
2. The developer shall present proof, at his own expense, by a qualified laboratory, that the gravel to be used on the project meets State specifications.
3. The water main shall be tested by the developer or his designee at their own expense, for adequate fire flow (see Section 7:11.4). The fire flow test shall be

conducted by a Professional Engineer, at a time to be chosen by the Town's Fire Chief.

10:05 Interpretation.

Whenever these Rules and Regulations made under the authority hereof differ from those prescribed by any local ordinance, bylaw or other regulation, the regulation which imposes the greater restriction or the higher standard shall govern.

10:06 Enforcement by Denial of Building Permit.

1. The Building Inspector of the Town of Williamsburg shall not issue building permits for any of the lots in a subdivision unless notified in writing by the Chair of the Planning Board that the approved subdivision plans and documents have been recorded at the Hampshire County Registry of Deeds.
2. The Building Inspector of the Town of Williamsburg shall not issue occupancy permits for any of the lots in a subdivision unless notified in writing by the Chair of the Planning Board that the subdivision meets the Town's fire flow requirements. It is strongly suggested that the water main and related services be constructed as soon as possible to insure compliance with Section 7:11.4.
3. The Building Inspector of the Town of Williamsburg shall not issue occupancy permits for any of the lots in a subdivision unless the following have been installed:
 - a. all utilities services to the lot.
 - b. the bituminous binder on the roadway leading to the lot.

10:07 Material Testing.

The developer shall test, upon the request of the Planning Board and/or the Highway Superintendent and at his own expense, all materials to be used in the construction of the public ways. The tests shall be conducted by a qualified firm/laboratory/individual which has been

approved by the Planning Board and/or the Highway Superintendent.

10:08, Required inspections

The Planning Board may require that certain mandatory inspections shall be performed by the Williamsburg Highway Superintendent or his representative. Time charges for these required inspections will be as listed in Section 11:00.

SECTION 11:00
FEES

11:01 General.

1. A non-refundable filing fee payable to the Town of Williamsburg shall accompany each submission of a plan for endorsement as "Approval Not Required", each submission of a Preliminary Subdivision Plan and each submission of a Definitive Subdivision Plan.
2. A submission not accompanied by the required filing fee is incomplete and will not be considered by the Planning Board until such fee is paid in full.

11:02 Filing Fee for "Approval Not Required" Plans.

1. A plan submitted for "Approval Not Required" endorsement shall be accompanied by a minimum \$50.00 fee. For endorsement of a plan showing a division of land into more than two parcels, the fee shall be \$25.00 per parcel.
2. The filing fee shall be paid each time a new or revised plan is resubmitted for the same property.

11:03 Filing Fee for Preliminary Subdivision Plan.

1. Submission of a Preliminary Subdivision Plan shall be accompanied by a non-refundable filing fee of \$500.00 plus \$50.00 per lot.

11:04 Filing Fee for Definitive Subdivision Plan.

1. Submission of a Definitive Subdivision Plan shall be accompanied by a non-refundable filing fee of \$4500.00 plus \$150.00 per lot.
2. At the conclusion of the review period, upon approval of the Definitive Plan by the Planning Board following public hearing and registration of the plan in the Registry of Deeds, the Planning Board may waive the \$150.00 per lot fee for those lots designated on the plan as permanently restricted open space.
3. If submission of a Definitive Subdivision Plan has

been preceded by submission of a Preliminary Subdivision Plan of the same parcel and general layout which has been approved by the Planning Board within 90 days, the filing fee paid for the Preliminary Subdivision Plan will be credited toward the filing fee for the Definitive Plan for a subdivision on the same property. Said credit may only be applied once to the Definitive Plan.

4. If a Definitive Subdivision Plan is withdrawn without prejudice with the consent of the Planning Board, and that withdrawal is prior to the posting of a public hearing, resubmittal of substantially the same plan within 120 days shall be accompanied by a filing fee calculated at 50% of the filing fee that would be due if the plan were being submitted for the first time.
5. If a Definitive Subdivision Plan is withdrawn after posting of the public hearing but prior to final action (approval, approval with modifications, or disapproval) by the Planning Board, resubmittal of that plan (whether modified or not) shall be treated as a new submission and shall be accompanied by a full filing fee.
6. The applicant shall pay a fee of \$500.00 each time additional material necessitating review by the Town is submitted between the time of the original submission of the Definitive Plan and the Board's decision. Said fee shall be waived when material requested by the Board is in the form of additional information not included in Sections 6:02 through 6:07. All additional submissions shall be accompanied by a completed application Form I (see Appendix B), which will automatically extend the Planning Board's review period by an additional sixty (60) days.

11:05 Charges for Town of Williamsburg representatives

Charges for Town employees as may be required by section 10:00 Shall be as established by the Selectboard of the Town of Williamsburg.

SECTION 12:00
RECORD PLANS

12:01 The function of the record plan is to facilitate the Town in locating all components of the underground utilities within a street and/or public easements, so that the utilities can be maintained, repaired and reconstructed in the future.

In preparing said plans, the project's professional engineer can make certain assumptions, such as, but not limited to: a sewer main was laid in a straight line between successive manholes, all materials (i.e, size and type of water pipe) are the same as what was shown on the approved construction plans, etc.

12:02 Developer shall submit one set of originals (mylars) and two sets of prints of the record plan which shall include the following:

1. Stamp by project's registered professional engineer.
2. Same scale and size as originals.
3. Plans to show:
 - a. Edge of road, type of curbing, driveways in existence at date of preparation of plan.
 - b. Right-of-way sidelines and lot property lines shown at least 100' from frontage (meters and bounds not necessary).
 - c. Sanitary Sewer.

Each component of sanitary sewer system to be clearly identified and marked.

Stationing of manholes based on center-to-center distances between successive ones with the lowest/beginning manhole having a 0+00 station.

Type, size and class of pipe between each manhole.

Location of sanitary sewer wyes with distances from center of downstream manhole.

Location of end of sanitary sewer service stubs at property lines (each location tied to fixed and easily identifiable objects) and elevations at end of pipe (Town datum) to be placed on 4" X 6" cards and submitted to the Planning Board prior to placement of gravel on roadway (see Section 10:04).

Type, size and class of sanitary sewer service pipe.

Location of, if any, pumping stations, siphons, etc.

d. Storm Sewer.

Each component of the storm sewer system to be clearly identified and marked.

Stationing of manholes based on center-to-center distances between successive ones with the lowest/beginning manhole having a 0+00 station.

Type, size and class of pipe between each successive manhole and between manholes and catch basins.

Location of individual house/lot sub-drains, if any, within the proposed road layout. Location of connections of said sub-drains to storm system (i.e., distance from center of downstream manhole to connection, etc.). Location, ties to easily identifiable objects and elevation (Town datum) of end of sub-drains at property line. Each location, ties and elevation to be placed on a 4" X 6" card and submitted to the Planning Board prior to placement of gravel on roadway.

Type, size and class of sub-drains.

Location, size and class of roadway curtain drains, if any, within proposed layout.

Detention ponds, including elevations of inlet and outlet structures and pond bottom.

e. Water System.

Each component of water system to be clearly identifiable and marked.

Location and ties to fixed and easily identifiable objects of all water gates, curb stops, tees, bends, reducers, T.S.&V., corporations, etc. Each location and ties for each of the above to be placed on 4" X 6" cards and submitted to the Planning Board prior to placement of gravel on roadway (see Section 10:04).

Location, type and class of water main, hydrant branches, water services, etc.

f. Public/Private Utilities.

It shall be the responsibility of the developer to insure that each public utility (gas, electric, telephone, cable TV) provides all the necessary information to the person preparing the record plan, so that all components of each system can be plotted on the record plan. Components of said system which can be identified on the ground, such as gates, hand-holes, transformers, etc., shall be verified by project's professional engineer.

g. Profile showing centerline of roadway and complete profile of storm and sanitary systems.

h. Elevations to be Town datum.

SECTION 13:00
STREET ACCEPTANCE PLANS

13:01 General.

Street acceptance plans are optional. In the event that a petition for street acceptance of a roadway in a subdivision is presented to the Town, a plan based on the criteria mentioned below must be submitted as a condition of acceptance.

13:02 Criteria.

1. Developer shall submit two sets of originals (mylars) and three sets of prints.
2. Plans must be prepared by a land surveyor registered in the Commonwealth of Massachusetts.
3. Size 24"x36".
4. Rules of the Registry of Deeds to be followed.
5. Only one proposed street to be shown per sheet.
6. Match lines to be used if a street is to be shown on more than one sheet.
7. Title block:

THE COMMONWEALTH OF MASSACHUSETTS
STREET ACCEPTANCE PLAN OF
(name of street)
PREPARED FOR THE TOWN OF WILLIAMSBURG
HAMPSHIRE COUNTY

8. Scale 1" = 40'.
9. Date plan was prepared.
10. Reserved Spaces for:
 - a. Town Clerk's endorsement:

(name of street) accepted by the Town of
Williamsburg on (date).
Attest: _____, Town Clerk.

b. Statement that:

(name of street) is part of the (name)
subdivision approved by the Williamsburg Planning
Board, filed with the Town Clerk on (date) and
recorded at the Hampshire County Registry of
Deeds (book and page).

c. Planning Board's endorsement that "Approval is
not Required".

11. Street line to be shown in metes and bounds. Tie
courses to be provided so that street can be closed
mathematically. Chord bearings and distances for all
curves to be shown.
12. All street line monuments to be shown and identified.
13. At least 100 feet of lot property lines to be shown
with metes and bounds.
14. Ownership of lots (including Registry book and page).
15. Land court case numbers, whenever applicable, must
appear on the plans.

SECTION 14:00
EFFECTIVE DATE

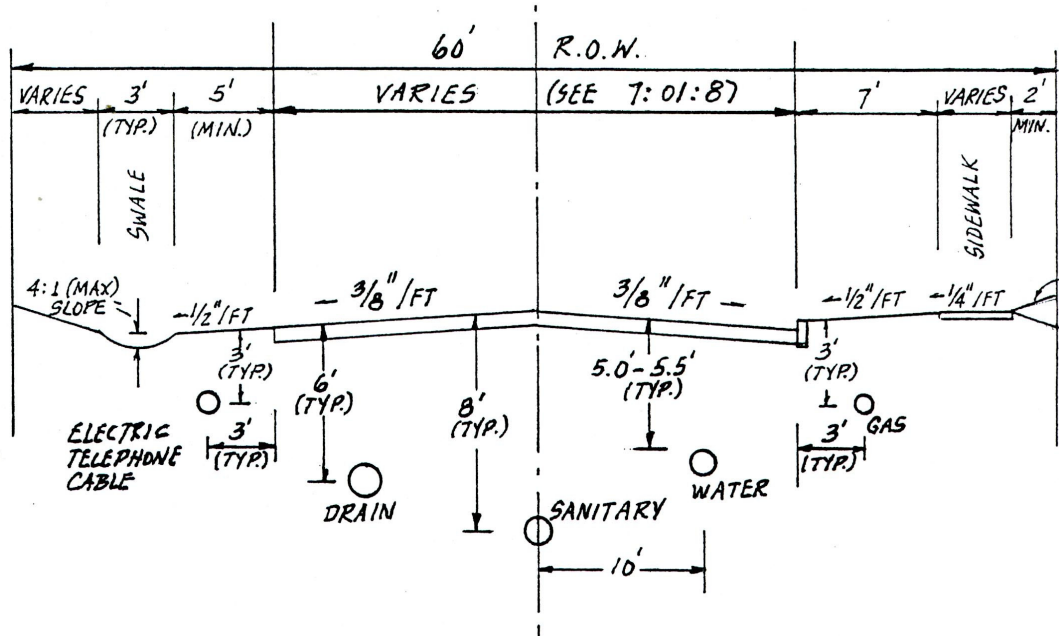
These Rules and Regulations shall be effective on and after 10/03/2005. Amendments are effective on the date approved by the Planning Board.

A copy of these Rules and Regulations as adopted by the Planning Board and certified by the Town Clerk shall be recorded with both the Registrar of Deeds of Hampshire County and the Recorder of the Land Court.

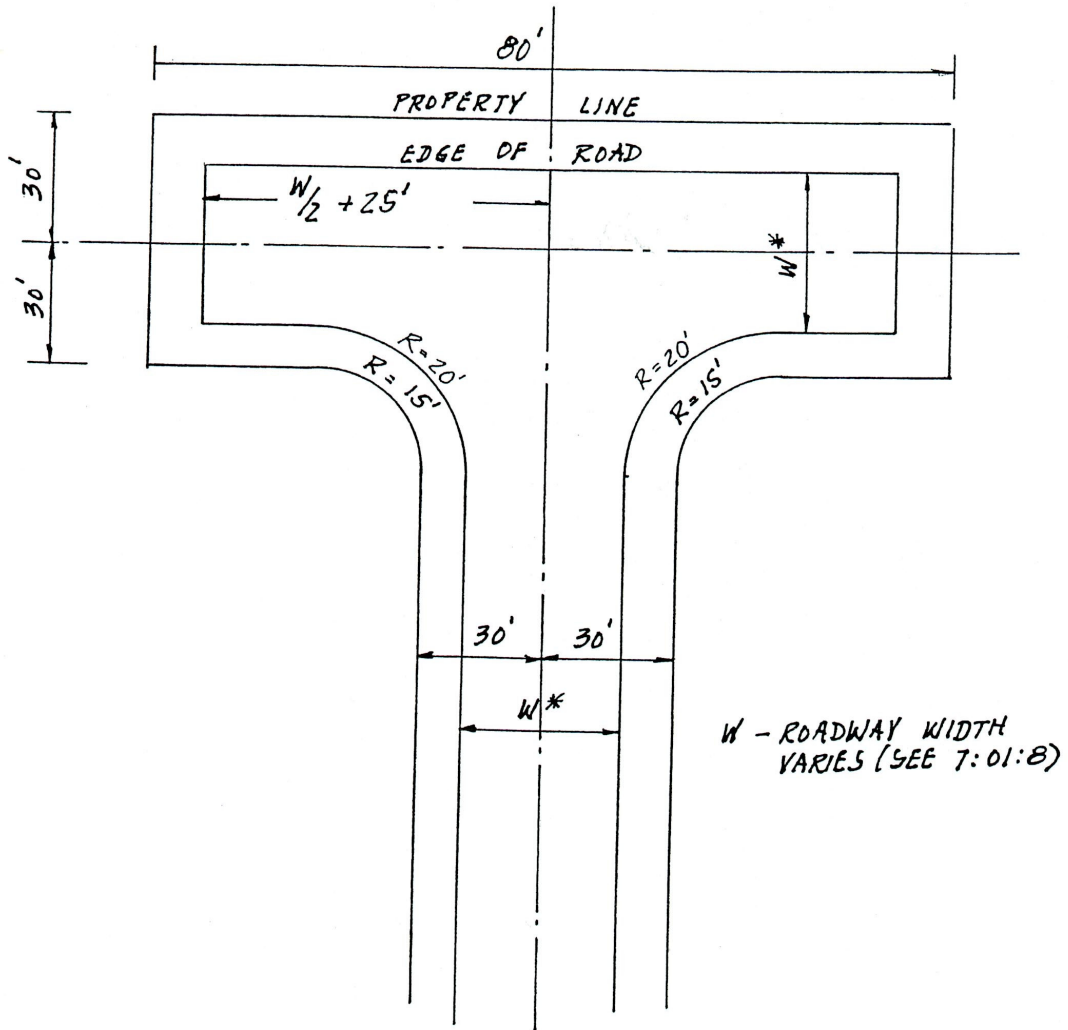
APPENDIX A

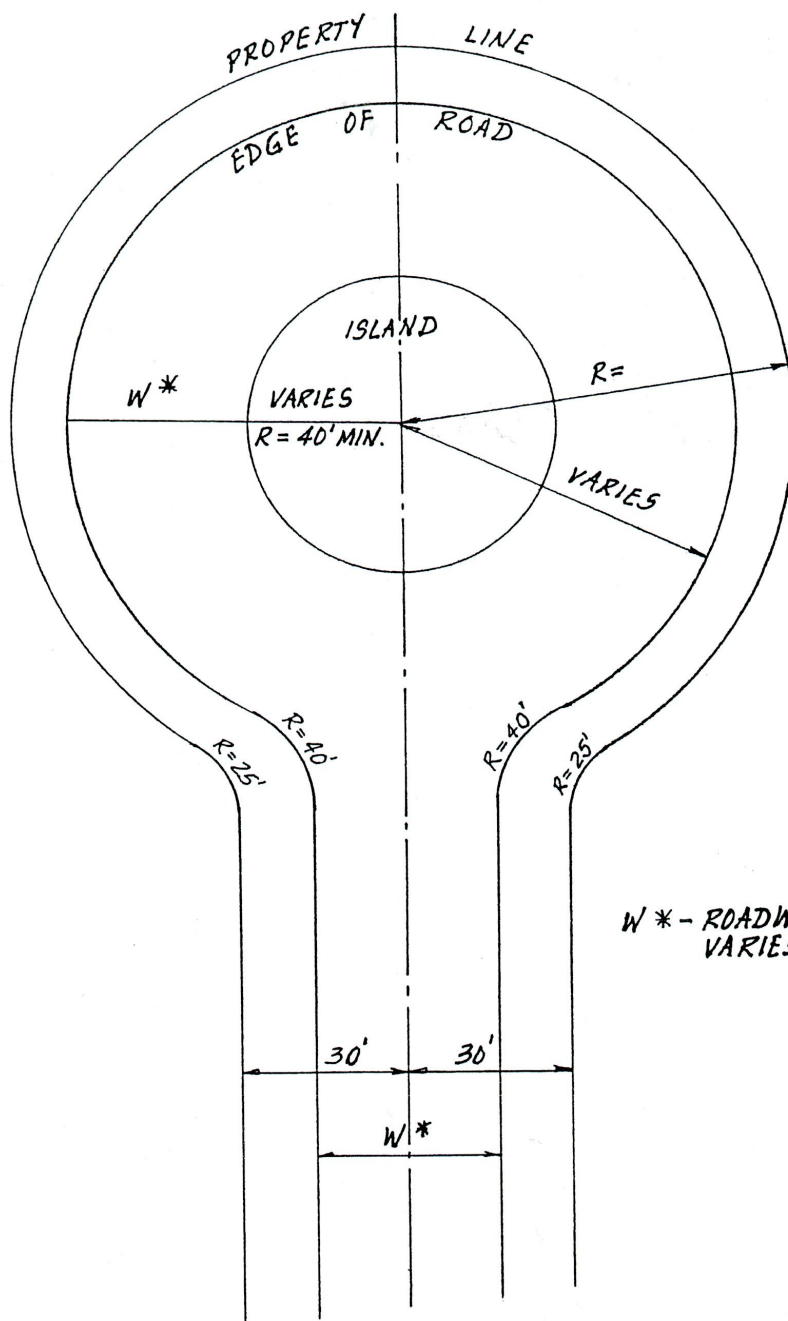
PLANS

STREET CROSS SECTION (TYPICAL)
(NOT TO SCALE)



HAMMERHEAD
(NOT TO SCALE)





W* - ROADWAY WIDTH
 VARIES (SEE 7:01.8)

APPENDIX B

FORMS

Attached are samples of the forms used for the administration of these regulations. The content of these forms may be revised from time to time by administrative action of the Planning Board.

**APPLICATION FOR ENDORSEMENT
OF PLAN BELIEVED NOT TO REQUIRE APPROVAL**

To the Planning Board:

5. Location and description of property:

Town Clerk: _____
Signature

APPLICATION FOR APPROVAL OF DEFINITIVE PLAN

To the Planning Board:

6. Location and Description of Property:

FORM C
Page 2 of 2
WILLIAMSBURG, MA

The following are all the mortgages and other liens or encumbrances on the whole or any part of the above described property:

The undersigned hereby covenants and agrees with the Town of Williamsburg upon approval of the Definitive Plan:

1. To construct the ways and install the services as finally approved by the Planning Board.

2. To design and construct the ways and design and install the utilities in accordance with the Rules and Regulations Governing the Subdivision of Land, Town of Williamsburg, Massachusetts, with the rules and instruction of the Board of Health, appropriate department heads, and with the Definitive Plan and its accompanying material as finally approved by the Planning Board.

This agreement shall be binding upon the heirs, executors, administrators, successors, and assigns of the undersigned.

Owner of Record _____
Print or type name Signature

Address Phone

Before me appeared _____, Owner of Record, and made oath that the above statements subscribed to him/her are true.

Notary Public: _____
Commission Expires: _____

Date of Submission: _____

Town Clerk: _____
Signature

Note: Complete Form D and attach.

FORM D
WILLIAMSBURG, MA

CERTIFIED LIST OF ABUTTERS

(Fill in this space with rough sketch of land described in this petition, and write against boundary lines the name and mailing address of adjoining owners in their relative positions. Also, include owners of land separated from the subdivision only by a street.)

Planning Board
Williamsburg, Massachusetts

Planning Board:

This is to certify that at the time of the last assessment for taxation made by the Town of Williamsburg, the names and addresses of the parties assessed as adjoined owners to the parcel of land shown above were as above written, except as follows:

Date of Verification_____

Board of Assessors _____

Authorized Signature

FORM E
WILLIAMSBURG, MA

DEPARTMENTAL REVIEW OF SUBDIVISION PLAN

To: Board of Health Building Inspector
 Highway Superintendent Conservation Commission
 Fire Department Police Department
 Board of Sewer and Water Commissioners

From: Planning Board

Date: _____

Subject: _____
 (description of plan, date, etc.)

1. The subject named plan herewith attached has been submitted to the Planning Board for approval as a subdivision.

For the guidance of the Planning Board will you please note any appropriate comment or approval on the blank below and/or on the plan itself and return to the Planning Board as soon as possible.

2. Under the requirements of Section 81-U of Chapter 41 of the General Laws the Board of Health must notify the Planning Board within forty-five (45) days (all others thirty (30) days) of the date of this notice if the Board of Health is in doubt as to whether any of the land in the subdivision can be used as building sites without injury to the public health.

_____ (do not detach) _____

To: Planning Board

Date: _____

Subject: _____
 (description of plan, date, etc.)

1. The undersigned **APPROVES / DISAPPROVES** (cross out one) of the subject named subdivision plan insofar as its requirements are affected.
2. The following comments are offered for the guidance of the Planning Board:

Department _____

Signed _____

FORM F
WILLIAMSBURG, MA

NOTICE OF SUBDIVISION APPROVAL OR DISAPPROVAL

To: Town Clerk

The Planning Board on_____ by_____ vote
date

APPROVED / DISAPPROVED (cross out one) the following subdivision
plan:

Name or description_____

New street names_____

Submitted by_____

Address_____

On_____

Date

pending termination of the statutory twenty day appeal period.

Signed_____

Chair, Williamsburg Planning Board

This vote of the Planning Board is duly recorded in the minutes
of their meeting.

c.c. Applicant

Building Inspector

Highway Superintendent

Fire Department

Board of Health

Board of Water and Sewer Commissioners

Police Department

Board of Assessors

Register of Voters

Conservation Commission

FORM G
Page 1 of 2
WILLIAMSBURG, MA

COVENANT

The undersigned _____ of
Print or type name(s)

_____, _____, _____
No. and Street City/Town State
hereinafter called the "Covenantor", having submitted to the
Williamsburg Planning Board the Definitive Plan of a subdivision

Name of Subdivision Dated
does hereby covenant to and agree with said Planning Board and
the successors in office of said Board, pursuant to Mass.
General Laws, Chapter 41, Section 81U, as amended, that:

1. The Covenantor is the owner of record of the premise shown on said plan;
2. This covenant shall run with the land _____
(list specific lot no.)
and be binding upon the executors, administrators, heirs, assigns of the covenantor, and their successors in title to the premises shown on said plan.
3. The construction of ways and the installation of municipal services shall be provided to serve any lot in accordance with the applicable Rules and Regulations of said Planning Board before such lot may be built upon or conveyed, other than by mortgage deed; provided that a mortgagee who acquires title to the mortgaged premises by foreclosure or otherwise and any succeeding owner of the mortgaged premises or part thereof may sell any such lot, subject only to that portion of this Covenant which provides that no lot so sold shall be built upon until such ways and services have been provided to serve such lot;
4. Nothing herein shall be deemed to prohibit a conveyance subject to this covenant by a single deed of the entire parcel of land shown on the subdivision plan or of all lots not previously released by the Planning Board without first providing such ways and services;
5. This covenant shall take effect upon the approval of said plan;
6. Reference to this covenant shall be entered upon said plan and this covenant shall be recorded when said plan is recorded.

FORM G
Page 2 of 2
WILLIAMSBURG, MA

DATE

The undersigned_____ (wife, husband)
of the covenantor hereby agrees that such interest as (I, we)
may have in said premises shall be subject to the provisions of
this covenant and insofar as is necessary release all rights of
tenancy by the courtesy, dower, homestead, and other interest
therein:

EXECUTED as a sealed instrument this_____ day of
_____ 20_____.

Witness

Signature

Witness

Signature

Witness

Signature

COMMONWEALTH OF MASSACHUSETTS

Hampshire, Massachusetts

Date_____20_____

Then personally appeared_____
and acknowledged the foregoing instrument to be his/her free act
and deed, before me.

Notary Public

Commission Expires:_____

FORM H
WILLIAMSBURG, MA

DATE

RELEASE OF CONDITIONS
Or
CERTIFICATE OF PERFORMANCE

Certification is herewith given that _____
has complied with the conditions imposed by the Planning Board
of the Town of Williamsburg under Rules and Regulations
Governing the Subdivision of Land on Lot No. _____, or Lots
No. _____ as shown on plan entitled _____

_____ and recorded in Hampshire
County Registry of Deeds Plan

Book _____, Page _____.

By: _____
Chair, Williamsburg Planning Board

Hampshire, Massachusetts

Date _____

Then personally appeared _____, Chair,
Williamsburg Planning Board, and acknowledged the foregoing to
be his/her free act and deed before me.

Notary Public

Commission Expires: _____

FORM I
WILLIAMSBURG, MA

DATE

**APPLICATION FOR SUBMISSION/RESUBMISSION
OF ADDITIONAL PLANS, MATERIALS, INFORMATION, ETC.
AND FOR AN EXTENSION OF TIME PERIOD**

File one completed form with the Planning Board (with fee) and a copy with the Town Clerk in accordance with the requirements of Section 6:08.

To the Planning Board:

The undersigned herewith submits/resubmits the accompanying additional plan, materials, information, etc., relative to the previously filed Definitive Subdivision Plan entitled _____ and originally filed on _____, for approval under the requirements of the Subdivision Control Law and the Rules and Regulations Governing the Subdivision of Land of the Planning Board in the Town of Williamsburg.

Submitted/Resubmitted Plans, Materials, Information:

_____ (Title)	_____ (Sheet(s))	_____ (Dated)
_____ (Title)	_____ (Sheet(s))	_____ (Dated)
_____ (Title)	_____ (Sheet(s))	_____ (Dated)

With this Submission/Resubmission of the above listed additional plans, materials, information, I am also hereby requesting a sixty (60) day extension, from the date of this filing, to the Planning Board's Decision Deadline Date for the Approval or Disapproval of this Definitive Subdivision Plan.

Applicant _____
(Print or type name) (Signature)

Before me appeared _____, the Applicant, and acknowledged the foregoing to be his/her free act and deed before me.

Notary Public
Commission Expires: _____

Date of Submission: _____
Town Clerk: _____
(Signature)

APPENDIX C

STANDARDS FOR DEVELOPMENT OF IMPACT STATEMENT

STANDARDS FOR DEVELOPMENT IMPACT STATEMENT

1. Traffic - Circulation. "Trip Generation Standards" by the Institute of Transportation Engineers. Explain traffic impacts, types of streets, opportunity for public transit access, impacts on vehicle, pedestrian and bicycle circulation.
2. Sewer and Water. Projected generation of sewage based on standards in 314-CMR by the Massachusetts Department of Environmental Protection. Projected consumption of water based on standards in "DESIGN", latest edition, Elwyn E. Seelye. Fire flow standards cited in these Regulations. Explain impacts of project on sewerage facilities and public water facilities (including impacts on fire flow requirements).

3. School.

For purposes of future planning the school enrollment impact analysis should utilize the following ratios adjusted to housing types:

Single Family Detached Homes	- .75	children/unit
------------------------------	-------	---------------

Single Family Attached Homes (townhouse/rowhouse)	- .5	children/unit
--	------	---------------

Two Family Structures		
First Unit	- .375	children/unit
Second Unit	- <u>.30</u>	children/unit
	.675	children/unit

Three Family Structures		
First Unit	- .375	children/unit
Second Unit	- .30	children/unit
Third Unit	- <u>.25</u>	children/unit
	.925	children/unit

Four Family Structures		
First Unit	- .375	children/unit
Second Unit	- .30	children/unit
Third Unit	- .25	children/unit
Fourth Unit	- <u>.20</u>	children/unit
	1.125	children/unit

Multi-Family (5 or more units per structure - condos or apartments).	- .112	children/unit
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