

## **1.0 AUTHORITY AND PURPOSE**

### **1.1. Authority:**

Under the authority vested in the Community Planning and Development Commission (hereinafter referred to as "CPDC" or "Commission") of the Town of Reading by Massachusetts General Laws, Chapter 41, Sections 81K through 81GG, as amended, said Commission has adopted, effective as of August 28, 2006, these Rules and Regulations Governing the Subdivision of Land in Reading, which are hereinafter referred to as "Subdivision Regulations" or as "the(se) Regulations."

### **1.2. Purpose:**

These Regulations have been enacted, consistent with Massachusetts General Laws, Chapter 41, Section 81M, in order to protect the safety, convenience, and welfare of the inhabitants of Reading by regulating the laying out and construction of ways in subdivisions, to ensure sanitary conditions in subdivisions, and to provide for parks and open space areas where appropriate. The powers of CPDC under these Regulations shall be exercised with due regard:

- a. for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel;
- b. for lessening congestion in such ways and in adjacent public ways;
- c. for reducing danger to life and limb in the operation of motor vehicles;
- d. for securing safety in case of fire, flood, panic, or other emergencies;
- e. for ensuring compliance with applicable zoning, health, conservation and natural resource protection by-laws;
- f. for securing adequate provision for water, sewerage, drainage, underground utility services, fire, police, and other similar municipal equipment, street lighting, and other requirements where necessary in a subdivision;
- g. for coordinating the ways in a subdivision with each other and with the public ways in the town and with ways in neighboring subdivisions; and
- h. for the encouragement of the use of solar energy and the protection of solar access.

In addition to these purposes, these Regulations are intended:

- i. to implement the goals, objectives, and action strategies of the Master Plan and the Open Space and Recreation Plan;
- j. to implement the Commission's development objectives, policies, and design standards;
- k. to protect the interests of abutting property owners and of the citizens of Reading; and
- l. to facilitate the provision of municipal services in the most cost-effective manner possible.

## **2.0. DEFINITIONS**

The definitions contained in Section 2.0. of the Zoning By-Laws and Section 5.7. of the General Bylaws of the Town of Reading and those contained in Massachusetts General Laws Chapter 40A, Section 1A; Chapter 41, Section 81L, and Chapter 131, Section 40, are incorporated into these Regulations by reference; in addition, for the purposes of these Regulations the following words shall have the following meanings. In the event of a conflict between or among definitions, the most restrictive definition shall apply unless it conflicts with State statute in which event the statute shall apply.

- 2.1. **Approval, Acceptance, Certification, or Endorsement:** No plan shall be approved, accepted, certified, or endorsed except by an affirmative vote on the part of at least a majority of the full membership of CPDC acting on a positive motion to approve, accept, or endorse such plan; any other vote or any affirmative vote by a lesser number of members shall constitute denial or disapproval of a plan.
- 2.2. **Bikeway:** A way designed to be used primarily or exclusively by a bicycle or similar nonmotorized vehicle.
- 2.3. **Cul-de-Sac:** A single continuous stretch of road open at one end and closed at the other by a paved circle or "bulb".
- 2.4. **Curb Inlet:** An inlet grate with an opening or openings in a vertical plane.
- 2.5. **Dead End Street:** A single continuous stretch of road open at one end and closed at the other which is not a cul-de-sac.
- 2.6. **Developable Land:** A parcel which, according to the Reading Zoning By-Laws, may be subdivided or further subdivided into lots; for purposes of these Regulations, developable land shall be considered as including any parcel or lot or combination of parcels which is of a size equal to or greater than twice the minimum lot size allowed by the Zoning By-Laws or as otherwise previously authorized by the Zoning Board of Appeals.
- 2.7. **Developer or Subdivider:** The applicant as defined in MGL Chapter 41, Section 81L.
- 2.8. **Drain:** A channel or pipe that carries storm drainage water.
- 2.9. **Easement:** A right in land acquired by public authority or other party to use or control property for access, utilities, drainage, or some other purpose.
- 2.10. **Elevation Reference:** The datum plane for measuring height elevations shall be the Reading Sewer Base elevation as determined by the Engineering Division of the Department of Public Works.
- 2.11. **Lot:** An area of land in one ownership, with definite boundaries, used, or available for use, as the site of one or more buildings.
- 2.12. **MGL:** Massachusetts General Laws
- 2.13. **Owner:** The person(s), partnership, association, group, corporation, or other legal entity holding fee simple title to a parcel of land as shown on record of the Middlesex South Registry of Deeds, Registry of Probate, or Land Court.
- 2.14. **Parcel:** A delimited area of land with definite boundaries whether or not intended or allowed to be built upon.
- 2.15. **Public Way:** Any street which has been accepted as a public way pursuant to MGL Chapter 82, or any way established by court decree to be a public way by dedication, prescription, or other legal means.
- 2.16. **Right-of-Way:** The entire parcel of land intended or designed to provide access and rights of passage extending from the boundary of one parcel to the boundary of another parcel.
- 2.17. **Roadway:** A way within a right-of-way intended or designed primarily for the passage

- of vehicles.
- 2.18. **Sanitary Sewer:** A sewer that carries wastewater.
  - 2.19. **Sidewalk:** A paved surface within a right-of-way designed or intended primarily for pedestrian use.
  - 2.20. **Sight Distance:** The length of roadway in any direction visible to the driver of a vehicle.
  - 2.21. **Storm Drainage:** A drainage system that carries storm water, surface water, and the discharge from subsurface drains but does not carry wastewater.
  - 2.22. **Stormwater Runoff:** The portion of precipitation which flows over the ground surface during and for a short time after a storm.
  - 2.23. **Street Alignment:** The sequence of straight lines and curves which define the location, direction, and layout of a street.
  - 2.24. **Street, Arterial:** A street of regional significance which carries high volumes of traffic between and through towns; such streets may also provide direct access to abutting parcels.
  - 2.25. **Street, Collector:** A street used primarily to connect local streets with arterial streets; such streets may also provide direct access to abutting parcels.
  - 2.26. **Street, Local:** A street which primarily serves to provide direct access to abutting parcels.
  - 2.27. **Subdivision:** The division of a tract of land into two or more lots, including resubdivision, and, when appropriate to the context, the process of subdivision or the land or territory subdivided; provided, however, that the division of a tract of land into two or more lots shall not be deemed to constitute a subdivision within the meaning of the Subdivision Control Law if, at the time when it is made, every lot within the tract so divided has frontage, which fully conforms with the provisions of the Reading Zoning By-Laws, on:
    - a. a public way or a way which the Town Clerk certifies is maintained and used as a public way, or
    - b. a way shown on a plan theretofore approved and endorsed in accordance with the Subdivision Control Law, or
    - c. a way in existence when the Subdivision Control Law became effective in the Town of Reading, having, in the opinion of CPDC, sufficient width, suitable grades, and adequate construction to provide for the needs of vehicular traffic in relation to the proposed use of the land abutting thereon or served thereby, and for the installation of municipal services to serve such land and the buildings erected or to be erected thereon.
  - 2.28. **Subdivision Control Law:** MGL Chapter 41, Sections 81K through 81GG inclusive as it may be amended from time to time.
  - 2.29. **Tributary Area:** When the surface runoff in an area contributes to the flow at a particular location, the area is said to be a tributary area.
  - 2.30. **Utilities:** Private and municipal services, which include sanitary sewer, stormwater drainage, water supply, fire alarm, natural gas, electric, telephone, and cable television, and all appurtenances.
  - 2.31. **Vertical Curve:** The portion of a roadway line along which a change in alignment occurs in the vertical plane.

### **3.0. GENERAL PROVISIONS**

#### **3.1. Separability:**

Should any provision of these Subdivision Regulations be determined to be invalid by a court of competent jurisdiction, the remaining provisions hereof not manifestly inseparable from the invalid provisions shall remain in full force and effect.

#### **3.2. Reference to Statute:**

For matters not covered by these Regulations, MGL Chapter 41, Sections 81K through 81GG inclusive, as may be amended from time to time, shall govern.

#### **3.3. Zoning Compliance and Suitability of Land:**

##### **3.3.1. Zoning Compliance:**

Any application for which compliance with all provisions of the Reading Zoning By-Laws is not demonstrated as to each proposed buildable lot shall be considered not to be a complete application within the meaning of Section 3.5 below. It is the responsibility of the applicant to comply with and to demonstrate compliance of the plans with the Zoning By-Laws. If an action or determination by another Board or Commission, such as the Zoning Board of Appeals or the Conservation Commission, is necessary for the full demonstration of zoning compliance, then such action or determination shall be sought and obtained by the applicant prior to the submission of any application pursuant to these Regulations.

##### **3.3.2. Suitability of Land:**

No Definitive Plan of a subdivision of land shall be approved unless, after consultation with the Board of Health, the CPDC determines that the land on which the subdivision is proposed can be so used without danger to health. For the protection of health, the CPDC or the Board of Health shall deem unsuitable for the erection of a dwelling any portion of a lot not more than six feet in elevation above the nearest water body, marsh, bog, swamp, or wetland as shown on the current edition of the U.S. Coast and Geodetic Survey or as delineated by the Conservation Commission, or that is less than four feet above the highest groundwater level as determined by the Board of Health. The Developer's Engineer shall set minimum cellar or basement floor elevation for each proposed lot not lower than two feet above groundwater as so determined by the Board of Health and as consistent with the design profile or site grading as shown on the Preliminary and Definitive Plans; such cellar or basement floor elevation shall be noted on said plans with respect to each proposed lot.

#### **3.4. Authority to Undertake a Subdivision:**

No subdivision within the meaning of MGL Chapter 41 shall be made or the improvement or sale of lots, the construction of ways, or the installation of utilities therein shall proceed unless and until a Definitive Subdivision Plan has been submitted to and approved by CPDC, and only then may commence or continue such work in strict accordance with the conditions of such approval, with the procedures set out in these Regulations, with the Reading Zoning By-Laws, with the conditions set forth by the Board of Health, and with all other applicable rules, regulations, and laws.

**3.5. Submission of Applications:**

**3.5.1.** Submission of applications pursuant to these Regulations shall be by any method specified in MGL Chapter 41 Sections 81O, 81S, 81T, or 81U as appropriate. All applications and all accompanying materials shall be the property of the Town of Reading and one copy of all materials submitted shall be retained by the Department of Community Development, and one reproducible copy of Preliminary Plans and Definitive Plans shall be retained by the Engineering Division of the Department of Public Works.

**3.5.1.1. Submission of Plans Believed Not to Require Approval:**

The applicant shall submit:

- a. The original of materials specified in Section 4.0 hereof, in an appropriately sized envelope marked on the outside with the name of the applicant and the address of the subject property and marked "original"; the mylar or linen original drawings of the plan may be rolled and attached to this envelope;
- b. A fully completed Application Form (Form A);
- c. Three full sets of copies of all such materials including drawings, each set in a separate envelope marked on the outside with the name of the applicant and the address of the subject property;
- d. A certified check payable to the Town of Reading equal to the application fee as set forth in Section 3.6. hereof.

**3.5.1.2. Submission of Preliminary and Definitive Plans:**

The applicant shall submit:

- a. The original of materials specified, as appropriate, in Section 5.0 or 6.0 hereof, including a fully completed Application for Subdivision Approval (Form B), in an appropriately sized envelope marked on the outside with the name of the applicant and the proposed name of the subdivision and marked "original"; the set of mylar or linen original drawings may be rolled and attached to this envelope;
- b. Sixteen full sets of copies of all such materials including drawings, each set in a separate envelope marked on the outside with the name of the applicant and the proposed name of the subdivision and marked as follows:
  - one each to: Department of Public Works--Engineering
  - Tree Warden
  - Municipal Light Department
  - Fire Department
  - Police Department
  - Historical Commission
  - Conservation Commission
  - Town Clerk
  - Community Development Department
  - two each to: Town Planner
  - five each to: Community Planning and Development Commission
- c. A certified check payable to the Town of Reading equal to the applicable application fee as set forth herein; and a certified check payable to the Town of Reading equal to the applicable inspection fee as set forth in Section 3.6. hereof;

- d. A copy of the Certified Abutters List;
- e. Stamped envelopes addressed to parties identified on said Abutters List in accordance with Section 3.5.4. below;
- f. A receipt from the Board of Health showing that related application has been submitted to such Board in accordance with Section 3.5.3 below.

**3.5.2. Notice to Town Clerk of the Filing of an Application:**

Any party submitting an application to CPDC under these Regulations shall give written notice, accompanied by a copy of the application form (Form B), to the Town Clerk by delivery or by registered mail, postage prepaid, that such a plan has been submitted to CPDC. The notice shall describe the land to which the plan relates in sufficient detail for identification and shall state the date when the plan was submitted and the name, address, and day-time telephone number of the property owner, and of the party submitting the application if different from the property owner.

**3.5.3. Submission to the Board of Health:**

In accordance with MGL Chapter 41, Section 81U the applicant shall file with the Board of Health a copy of the application concerning the subdivision. This copy is in addition to those required according to Section 3.5.1.2. hereof.

**3.5.4. Certified List of Abutters:**

In connection with an application for approval of a Preliminary Plan or a Definitive Plan an applicant shall obtain a Certified List of Abutters by filling out a Request for Certified Abutters List (Form C) and submitting it to the Department of Community Development. Said Department shall forward the request to the Board of Assessors, who shall prepare such list and certify it and forward it to the Department of Community Development, which shall mail the list to the applicant. The applicant shall include a copy of the list in the application, together with one business-size envelope containing sufficient postage for first-class mail and addressed to each party identified on the list.

**3.6. Fees:**

Application and Inspection Fees as described below shall be payable to the Town of Reading, by certified check only, at the time of filing of a subdivision plan pursuant to these Regulations. Any application not accompanied by the appropriate fee payment at the time of application shall be considered improper and incomplete in accordance with Section 3.7. hereof. No fees are refundable in whole or in part under any circumstances.

**3.6.1. Application Fee for an Approval-Not-Required Plan:**

- \$100.00 for plans showing adjustment of lot lines with no creation of new lots,
- \$100.00 for plans showing the creation of up to three lots, plus \$25.00 for each additional lot over three;
- plus an additional \$100.00 surcharge for either of the above Approval-Not-Required plans filed less than seven days prior to the next scheduled CPDC meeting, if endorsement is sought at

such meeting.

**3.6.2. Application Fee for a Preliminary Subdivision Plan:**

\$150.00 plus \$10.00 per lot shown on the plan.

**3.6.3. Application Fee for a Definitive Subdivision Plan:**

**3.6.3.1.** In cases where no Preliminary Subdivision Plan had been filed:  
\$500.00 plus \$30.00 per lot shown on the plan.

**3.6.3.2.** In cases where a Preliminary Subdivision Plan had been filed:  
\$350.00 plus \$20.00 per lot shown on the plan.

**3.6.3.3.** Resubmission of an amended Definitive Subdivision Plan following the withdrawal or denial of an earlier proposed Definitive Plan, or major modification to an approved Definitive Subdivision Plan:  
one-quarter of the original fee as specified in Section 3.6.3.1. or 3.6.3.2. as applicable

**3.6.3.4.** Inspection Fee, in addition to above:  
\$4.00 per foot measured along the centerline of the proposed roadway(s), from the centerline of intersection with an existing roadway to the back curb edge of any cul-de-sac, with a minimum of \$1000.00.

**3.6.4. Review Costs:**

In addition to all other fees and charges specified herein, if the Commission in the course of review of an application, determines in its sole and absolute discretion that review of all or any part of a proposed project by (an) outside independent consultant(s) of the Commission's sole choosing is necessary for proper evaluation of the proposed project or its possible effects on any matter of public interest under the jurisdiction of the Subdivision Control Law, then the applicant shall provide immediately to the Town, by way of the Town Planner, (a) certified check(s) payable to such consultant(s) in an amount equal to the estimated cost of the relevant services of such consultant(s). No Building Permit or Certificate of Occupancy shall be issued for said project until all such review fees that may be so imposed have been paid in full. The applicant shall have the right of administrative appeal to the Board of Selectmen as provided in MGL Chapter 44, Section 53G.

**3.6.5. Legal Advertising and Filing Costs:**

All expenses for legal notice advertising, abutter notification, and recording and filing of plans and documents shall be paid by the applicant. If the failure of the applicant to pay any such cost results in the nonfulfillment of any statutory notification requirement, the application shall be considered improper and incomplete in accordance with Section 3.7. hereof.

**3.7. Completeness of Application:**

**3.7.1.** Before CPDC may act on an application filed pursuant to these Regulations, CPDC or the Town Planner shall first determine whether the application is complete and properly submitted. In order for an application to be considered complete and properly submitted, the provisions of the submission requirements and the plan form and contents requirements contained herein shall be fully complied with.

If an application is determined not to be complete or not to be a proper submittal, it shall be denied without need of a public hearing; CPDC or the Town Planner shall send written notice to the applicant by registered mail at least seven days beforehand that CPDC will be considering such denial. The notification of any such denial or other action by CPDC shall be filed with Town Clerk within seven days following the vote by CPDC to do so.

**3.7.2.** If additional material as required herein or a request for a waiver is submitted after the original date of filing of the application, it shall not be considered by CPDC as part of the application nor shall it be considered as material perfecting the completeness of the application, unless it is accompanied by an Acceptance of Additional Application Material and New Submission Date form (Form D), filed with CPDC and the Town Clerk, signed by the applicant agreeing and acknowledging that the date of submission of such additional material shall supersede the original date of filing for purposes of determining the date by which CPDC must take action and make notification thereof with respect to the application.

**3.8. Waivers:**

In accordance with MGL Chapter 41, Section 81R, CPDC may at its discretion waive strict compliance with these Regulations in any particular case where such action is determined by CPDC to be in the public interest and not inconsistent with the intent and purpose of these Regulations or with Subdivision Control Law. A waiver may be approved only by a vote of the majority of the full membership of CPDC, which may make approval of any waiver conditional on requirements it specifies to be fulfilled by the applicant in the proposed subdivision, its vicinity, or the Town of Reading.

If an applicant desires certain requirements waived for a plan submitted pursuant to these Regulations, the request for waiver shall be submitted as part of the application as set forth in Section 3.7. The request shall cite the particular provision of these Regulations for which the waiver is requested and give justification therefor.

**3.8.1. Waiver of a Submission Requirement:**

If an applicant has, in the application, requested a waiver of a submission requirement, and if CPDC makes a finding that the waiver would not violate State Law or local By-Laws or would not impair the ability of CPDC or other Town Boards or officials to understand the nature and impacts of the proposed plan or to process the application, then CPDC may grant the waiver. If such a finding is not made then CPDC shall not grant the waiver, and the application may be determined not to be proper or complete and may be denied on that basis.

**3.8.2. Waiver of a Development Standard:**

An applicant may, in the original application or in writing subsequent thereto, request a waiver of a development standard contained in these Regulations. CPDC may, in its sole discretion grant, the waiver on a finding by CPDC that the waiver would be in the public interest and not inconsistent with the intent and purpose of the Subdivision Control Law and these Regulations. If such a finding is not made then CPDC shall not grant the waiver, and the application may be determined not to be proper or complete and may be denied on that basis. CPDC may require on-site or off-site improvements to be done by the applicant of cost reasonably related to the value of the waivers granted.

**3.9. Consent of the Property Owner:**

When the applicant does not own the property shown in a plan submitted with an application pursuant to these Regulations, the applicant shall state the nature of his or her interest in the property and shall submit the written consent of the record owner by having such owner endorse the application. In cases where the record owner is not an individual (e.g. a corporation, partnership, trust, or some other similar entity), proper documents shall be submitted with the application granting the party signing authority on behalf of the ownership entity. An application made by someone other than the record owner without such endorsement shall not be considered a proper submission.

**3.10. Withdrawal:**

An applicant may withdraw a submitted plan by filing with CPDC, the Board of Health, and the Town Clerk a written request for withdrawal on a Request to Withdraw an Application for Subdivision Approval form (Form E). If such request is filed before the date of publication of the first notice of public hearing, such request does not require CPDC approval; otherwise, the withdrawal is valid only upon approval by vote of a majority of the membership of CPDC.

**3.11. Extension:**

An applicant or CPDC may request an extension of the statutory time limits for CPDC to take and file notification of action on the submitted application in order to provide additional time to discuss issues related to the application. The request shall be made in writing on a Request for Extension of Statutory Deadline form (Form F), and shall be effective when signed by both the applicant and the Chairman of CPDC, and shall be filed with the Town Clerk.

**3.12. Rights of Others in Land Shown on a Plan:**

The approval of a plan by CPDC does not affect any rights which others may have in or over the land being divided or subdivided, nor does it give the applicant the right to perform work on land owned by others. CPDC assumes that any plans submitted for its consideration are correct unless evidence is presented to the contrary. The acquisition of necessary rights and the presentation of complete and accurate information to CPDC are responsibilities of the applicant, and failure to do so, including the failure or inability to obtain all necessary permits, licenses, releases, or rights may constitute reason for denial of a plan or for rescission of approval of a Definitive Plan.

**3.13. Endorsement and Certification:**

Endorsement of Approval-Not-Required and Certification of Definitive Plans shall be by signature on the first page of the plans of the majority of the full membership of CPDC following a vote by a majority of the full membership of CPDC in favor of a motion to endorse an Approval-Not-Required Plan or to approve, with or without conditions, a Definitive Plan; the signature of the Chairman of CPDC on subsequent pages of a set of Definitive Plans shall attest to the signature of such majority on the first page thereof as an alternative to the signature on all such subsequent pages of such majority.

**3.14. Public Open Spaces and Protection of Natural Features:**

Before approval of a Definitive Plan, the Commission may require that the Plan 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 the

prospective uses of such land. The Commission may by appropriate endorsement on the Plan require that no building be erected upon such park or parks for a period of not more than three years from the date of Definitive Plan approval without its approval. This land shall be made available for acquisition by the Town with just compensation to the owner thereof. The failure of the Town to make such an acquisition within such three years shall free the owner from this requirement.

The Commission may also require that the Plan make accommodation for or provide access to existing or potential greenways, bikeways, open space, Town Forest, Town Conservation land and natural areas, identifiable in accordance with criteria established in the Town of Reading's Master Plan or Open Space and Recreation Plan.

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

### **3.15. Off-Site Mitigation:**

**3.15.1.** It shall be the responsibility of an applicant who has received subdivision approval under these Regulations to properly repair or remedy any damage done to, or debris or other materials deposited on properties or ways within or outside of the subdivision, by any party performing work within the subdivision. CPDC may hold an appropriate bond amount against the fulfillment of this responsibility.

**3.15.2.** If CPDC finds in reviewing a proposed subdivision plan that the proposed subdivision creates or aggravates adverse impacts on abutting or nearby properties, public or private ways or other facilities of the Town of Reading, then the CPDC as a condition of approval of any such plan may require the applicant to take such actions as are necessary to mitigate the creation or aggravation of such adverse impacts. The conditions or requirements imposed by CPDC shall be proportional to the nature and extent of the impacts caused by the proposed development.

If the CPDC finds that the proposed subdivision cannot be serviced by the public or private ways or other facilities of the Town of Reading in a manner so as to insure that the purposes of the Subdivision Control Law and of these Regulations are met, then the CPDC shall require that reasonable and appropriate improvements be made to the public or private ways or other facilities so as to insure compliance of such subdivision with the Subdivision Control Law and these Regulations. Such improvements shall be consistent with the requirements of Sections 7.0 and 8.0 hereof.

### **3.16. Blasting:**

If there is any blasting needed in any development approved in accordance with these Regulations, the applicant shall be responsible for implementing the following program:

- a. The party conducting the blasting shall have a certificate of competence from the Commonwealth of Massachusetts and shall have requisite insurance and blasting, public liability insurance as required by 527 CMR 13.00 effective March 1, 1996 and as may be amended from time to time.
- b. The party conducting the blasting shall obtain a permit from the Fire Chief and shall file with the Fire Chief a statutorily required bond with sureties, as required by MGL Chapter

148 Section 10A, 527 CMR 1.04, and MGL Chapter 148 Section 19.

- c. A pre-blast survey shall be conducted of all improvements on properties any portion of which lie within 500 feet of the blast location.
- d. At a minimum all provisions of 527 CMR: Board of Fire Prevention Regulations, 13.00 Explosives, shall be fully adhered to.

**3.17. Accuracy of Plans:**

Applicants are hereby notified that all details, including but not limited to site grading or the preservation of trees indicated as to be saved or preserved, shown on any approved Definitive Subdivision Plan are binding on the applicant for full and faithful implementation.

**3.18. Continuance of Obligation:**

Applicants are hereby notified that CPDC shall hold the applicant, or the applicant's heirs, successors, or assigns in the entirety of the subdivision, solely responsible for the complete, proper, legal, and workmanlike compliance with these Regulations, with all terms and conditions of approval of the applicant's Definitive Subdivision Plans, and with all other applicable laws, by-laws, and regulations. This responsibility shall cease upon the issuance by the CPDC of a Certificate of Completion (Form O) for the subdivision.

#### **4.0. PLANS BELIEVED NOT TO REQUIRE APPROVAL UNDER SUBDIVISION CONTROL LAW (ANR PLANS)**

##### **4.1. Application and Plan Form and Content:**

Any person who wishes to record a plan of land in the Registry of Deeds or Land Court and who believes that the plan does not require approval under the Subdivision Control Law, may apply to CPDC for a determination and endorsement of the plan to that effect. The applicant shall submit such a plan in accordance with Section 3.5.1.1. and the following:

- a. Application for Endorsement of a Plan Believed Not to Require Approval form (Form A), fully completed and properly executed, including a statement, supported by accompanying documentation, of the basis upon which the applicant claims that approval of the plan under Subdivision Control Law is not required and either a confirmation that the applicant is the owner of record of the subject property or a signature from the owner of record authorizing the applicant to make the application, and the signature of the appropriate Town official as to whether the subject property contains or may contain any wetlands resource area.
- b. Plan of Land, of the following format and containing the following information:
  1. Format, size, and original drawing base material acceptable to the Registry of Deeds or Land Court as appropriate.
  2. Plan title, boundaries, north arrow, and scale.
  3. Name and address of the record owner, the applicant if different, the surveyor, and (if appropriate) the engineer.
  4. Seal and signature of the surveyor and (if appropriate) of the engineer.
  5. Locus inset at a scale of 1"=100', showing all properties and ways within a radius of 500 feet of the subject property.
  6. Owners' names and assessors map and parcel numbers of all abutting properties as they appear on the most recent Board of Assessors records; all adjacent properties in common ownership with the subject property shall be so identified and shown in their entirety.
  7. The entire extent of the existing lot or parcel of subject property, showing location of existing and proposed permanent bounds, clearly differentiated; and existing and proposed easement or right-of-way boundaries, clearly differentiated together with an indication of type and to whom rights therein have been or are proposed to be conveyed; together with sufficient survey data to confirm the determination of all such property, easement, or right-of-way boundaries.
  8. Name and width of the right-of-way providing frontage and access to the lots shown on the plan, the extent of the paved improvements within the right-of-way, and whether such right-of-way is an accepted public street or a private way.
  9. Dimensions of all existing and proposed lot, parcel, and easement lines.
  10. Identification numbers for existing and proposed lots.
  11. Location of all existing structures, together with parallel or perpendicular dimensions between them and the nearest points on the existing and proposed property lines.
  12. Identification of the zoning district(s) within which the subject property is located and any zoning district boundaries running through or along the property.

13. Length of legal frontage for each existing and proposed lot; frontage length for each lot shall be clearly and prominently shown; a table shall be provided showing calculations relative to Section 5.2.1. of the Reading Zoning By-Laws.
14. Delineated bounds of any wetlands resource area on the property if the application form indicates the presence on the subject property of such wetlands resource area.
15. Calculations of gross square footage of each existing and proposed lot or parcel, and calculations of the area of each lot or parcel not lying within any wetlands resource area.
16. Citation by name and case number of any variance or special permit granted by the Reading Zoning Board of Appeals relative to the subject property.
17. Any notations appropriate for fully explicating the plan.
18. For existing or proposed parcels which do not qualify as buildable lots according to the Reading Zoning By-Laws, a notation stating that such lots are not to be considered building lots.
19. Suitable signature lines for endorsement by CPDC.
20. A list of deed and plan references used to formulate the plan.
21. Date that the plan was prepared and date and nature or subsequent revisions.
22. If this plan applies to land shown on an approved Definitive Subdivision Plan which CPDC has not yet determined to have been completed or whose roadways have not yet been accepted as public ways by the Town, the plan shall contain the following wording with the appropriate information filled in:  
 "The endorsement of this plan shall in no way affect or derogate from the obligations of the owner or the owner's heirs, successors, or assigns, under the approval of a certain subdivision (name) granted (date) recorded at the Middlesex South Registry of Deeds (or Land Court) Book\_\_\_\_ Page\_\_\_\_, together with all security agreements relative thereto and subsequent amendments if any."

#### **4.2. Review and Decision Process:**

If CPDC finds that the application is not complete and properly submitted, CPDC shall deny the application without prejudice. If CPDC finds that the plan qualifies under Subdivision Control Law and these Regulations as not requiring approval, CPDC shall consider the plan at a public meeting (not a public hearing) within 21 days of the submittal of such plan, and following a vote to endorse the plan shall sign such endorsement on the plan. Such signature shall be sufficient to constitute evidence of the endorsement. CPDC shall not withhold such endorsement unless it finds that the plan shows a subdivision or has been submitted with insufficient evidence to substantiate the applicant's claim that the plan does not show a subdivision as provided in MGL Chapter 41 Section 81-L or that the plan shows a violation of the frontage and lot-size requirements of the Reading Zoning By-Laws. Should CPDC vote to refuse to endorse such a plan, it shall transmit notification of such vote with the reasons therefor to the Town Clerk and to the applicant.

If CPDC determines that a parcel of land does not conform in every respect with the requirements of the Reading Zoning By-Laws and of these Regulations as applicable, it may, in order to avoid confusion or misconstruction of the meaning of the endorsement, note on the plan that such parcel shall not be construed as a building lot, and if it determines that some action by

the applicant would be necessary for such a parcel to become a legal building lot according to the Zoning By-Laws it may note on the plan appropriate conditions.

One print of the endorsed plan shall be retained by the Department of Community Development, one such print by the Engineering Division of the Department of Public Works, and one such print by the Town Clerk.

## **5.0. PRELIMINARY SUBDIVISION PLANS**

### **5.1. Application and Plan Form and Content:**

Prior to submitting a Definitive Subdivision Plan for approval an applicant may submit for residentially zoned land and shall submit for non-residentially zoned land a Preliminary Subdivision Plan in order for CPDC, other Town Boards and Commissions, Town Staff, and owners of abutting and nearby properties to identify and discuss with the applicant issues and concerns relative to the proposed subdivision. Prior to submission, an applicant is encouraged to consult with appropriate Town Staff on any aspect of a proposed subdivision and the plans therefor.

**5.1.1.** The applicant shall submit such a plan in accordance with Sections 3.5.1.2. and 3.5.2. and the following:

- a. Application for Subdivision Approval form (Form B), fully completed and properly executed, including a confirmation that the applicant is the owner of record of the subject property or a signature from the owner of record authorizing the applicant to make the application, and the signature of the appropriate Town official as to whether the subject property contains or may contain any wetlands resource area.
- b. Preliminary Subdivision Plan, prepared by a Registered Professional Engineer or Registered Land Surveyor, consisting of one or more sheets, at a horizontal scale of 1"=40' and for profiles at a vertical scale of 1"=4', drawn clearly and legibly in indelible black ink on linen or mylar sheets not to exceed dimensions of 24 by 36 inches, with a 1-1/2-inch left margin and a one-half inch margin on all three other sides, containing the following information:
  1. Subdivision name, boundaries, north arrow (true, magnetic, or grid), date of preparation and of any subsequent revisions, legend, and scale.
  2. The title "Preliminary Subdivision Plan".
  3. Name and address of the record owner, the applicant if different, and the designer and engineer or surveyor, as appropriate.
  4. Seal and signature of the engineer or surveyor, as appropriate.
  5. Locus inset showing, according to Town record information, all properties within 1000 feet of any portion of the subject property, and showing the locations of all structures on all lots abutting the proposed subdivision site; and also showing the name, location, right-of-way width, pavement width, sidewalk location and width, of any existing public and private streets abutting, providing access to, or located within 1000 feet of any portion of, the proposed subdivision, together with labels as to whether each is an accepted or unaccepted way; drawn at a scale of 1"=100'.
  6. Owners' names and assessors map and parcel numbers of all abutting properties as they appear on the most recent Board of Assessors records; all adjacent properties in common ownership with the subject property shall be so identified and shown in their entirety.
  7. The entire extent of the existing lot or parcel of subject property, showing location of existing and proposed permanent bounds, clearly differentiated; and existing and proposed easement or right-of-way boundaries, clearly differentiated together with an indication of type and to whom rights therein have been or are proposed to be conveyed; together with sufficient survey data to confirm the

determination of all such property, easement, or right-of-way boundaries; if the applicant wishes to have some portion of such land designated in the proposed subdivision as not a part of the subdivision, the applicant shall provide as part of the application a letter from the Building Inspector determining that such portion is a legally separable and buildable lot.

8. Topography of the tract containing the proposed subdivision and of all lands within 100 feet of any portion thereof, with contour intervals not to exceed two feet and with spot elevations as appropriate.
9. Name, location, right-of-way width, pavement width, sidewalk location and width of any proposed street within the subdivision and a statement as to whether such street is proposed to be offered to the Town for acceptance as a public way (without such statement, CPDC shall assume such offer is not proposed).
10. Boundaries and identifications of any existing or proposed areas dedicated or intended to be dedicated to the Town for public use.
11. Dimensions of all existing and proposed lot, parcel, and easement lines.
12. Identification numbers for existing and proposed lots.
13. Location of all existing structures, together with parallel or perpendicular dimensions between them and the nearest points on the existing and proposed property lines.
14. Identification of the zoning district(s), including any zoning overlay district(s), within which the subject property is located and any zoning district boundaries running through or along the property.
15. Length of legal frontage for each existing and proposed lot; frontage length for each lot shall be clearly and prominently shown; a table shall be provided showing calculations relative to Section 5.2.1. of the Reading Zoning By-Laws.
16. Delineated bounds of any wetlands resource area on the property or within 200 feet of any portion of the property.
17. Calculations of gross square footage of each existing and proposed lot or parcel, and calculations of the area of each lot or parcel not lying within any wetlands resource area.
18. Citation by name and case number of any variance or special permit granted by the Reading Zoning Board of Appeals relative to the subject property.
19. Layout of proposed potable water, wastewater, storm and surface drainage systems, including the general location and size of drain lines, culverts, trenches, catchbasins, manholes, and other structures; of detention or retention basins, drywells, or other stormwater control device; of bodies of water or streams or other drainage feature on the site or that are proposed to receive discharge from the site; together with sufficient information to indicate general volumes, rates, flows, and similar factors, that would be generated by the subdivision and accommodated by the drainage system.
20. Any other notations or other information necessary or appropriate for fully explicating the plan.
21. A list of deed and plan references used to formulate the plan.

**5.1.2.** The inclusion of the following information on the Preliminary Plan is encouraged in order to provide further information to CPDC that would enable a more thorough review of the proposal and more complete feedback to aid the applicant in the development of any Definitive

Plan, for the submission of which this information will be required:

- a. Existing improvements within the subdivision, including buildings, fences, stone walls or stone fences, paving, and utility lines.
- b. Locations of ponds, intermittent or constant watercourses, large boulders, and other prominent natural features
- c. Locations and identifications of trees of 6-inch caliper or larger and of significant stands or groups of trees.
- d. All deed lines within the subdivision, and deed references.
- e. Location and sizes of all existing and proposed water and sewer lines, and estimates and projected water use and sewage generation according to standards contained in Manual #9 "The Design and Construction of Sanitary and Storm Sewers" of the American Society of Civil Engineers, or other standards acceptable to the Town Engineer.
- f. A profile of existing and proposed grades along the centerline and each right-of-way sidelines for all proposed streets and ways.
- g. The One-Hundred-Year flood profile as shown on the National Flood Insurance Program Maps issued by the Federal Emergency Management Agency.

**5.2. Review and Decision Process:**

If CPDC finds that the application is not complete and properly submitted, CPDC may deny the application without prejudice. If CPDC finds the application to be complete and properly submitted, CPDC shall consider the plan at a public hearing and notify the Town Clerk of its action relative to the plan within 45 days after the submittal of the application. By majority vote of the Commission's full membership, CPDC shall take one of the following actions:

- a. Disapproval of the plan, stating the reasons therefor:  
CPDC may also provide advice to the applicant relative to any subsequent Definitive Plan for the proposed subdivision, or
- b. Approval of the plan, or
- c. Approval of the plan with specified modifications and/or stated conditions:  
Insofar as the information submitted as part of a Preliminary Subdivision Plan application permits, the criteria for approval of a Definitive Subdivision shall be used in reviewing a Preliminary Subdivision.

Disapproval of a Preliminary Plan does not prevent the submission of a Definitive Plan for the proposed subdivision; approval of a Preliminary Plan does not constitute approval of the subdivision. No applicant or other party shall present a Preliminary Subdivision Plan for recording at the Registry of Deeds or Land Court, and a Registry of Deeds or Land Court shall not record a Preliminary Subdivision Plan.

## **6.0. DEFINITIVE SUBDIVISION PLANS**

### **6.1. Application and Plan Form and Content:**

Prior to submitting a Definitive Subdivision Plan for approval an applicant may and is encouraged to consult with appropriate Town staff, on any aspect of the proposed subdivision and the plans therefor.

**6.1.1.** The applicant shall submit such a plan in accordance with Sections 3.5.1.2. and 3.5.2. and the following:

- a. Application for Subdivision Approval form (Form B), fully completed and properly executed, including a confirmation that the applicant is the owner of record of the subject property or a signature from the owner of record authorizing the applicant to make the application, and the signature of the appropriate Town official as to whether the subject property contains or may contain any wetlands resource area.
  
- b. Definitive Subdivision Plan, prepared by a Registered Professional Engineer or Registered Land Surveyor, as appropriate, consisting of one or more sheets, at a horizontal scale of 1"=40' and for profiles at a vertical scale of 1"=4', drawn clearly and legibly in indelible black ink on mylar sheets not to exceed dimensions of 24 by 36 inches, with a 1-1/2-inch left margin and a one-half inch margin on all three other sides, along with an electronic file of the plan in a format acceptable to the Town Engineer, containing the following information:
  1. Subdivision name, boundaries, north arrow (true, magnetic, or grid), date of preparation and of any subsequent revisions, legend, scale, and the title "Definitive Subdivision Plan".
  2. Name and address of the record owner, the applicant if different, and the designer and engineer or surveyor, as appropriate.
  3. A title block containing:
    - (a) Name of the subdivision
    - (b) Section designation of the subdivision
    - (c) Sheet title and number
    - (d) Name, address, and telephone number of the record owner of the subdivision, and of the applicant, if different from the owner,
    - (e) Name, address, telephone number, and seal and signature of the engineer or surveyor, as appropriate.
  4. Suitable space, with signature lines, for certification signatures by the CPDC members, on the first sheet of the drawings, together with reference to existing covenants on the property and to covenant agreement(s) entered into in accordance with these Regulations, including proper space for annotation of book and page reference to the recording of said covenants, and an indication of conditional approval of the subdivision; each subsequent sheet shall have a space for the signature of the CPDC Chairman to indicate certification of the plan.
  5. Locus inset showing, according to Town record information, all properties within 1000 feet of any portion of the subject property, and showing the locations of all structures on all lots abutting the proposed subdivision site; and also showing the name, location, right-of-way width, pavement width, sidewalk location and width, of any existing public and private streets abutting, providing access to, or located within 1000 feet of any portion of, the proposed subdivision, together with labels

- as to whether each is an accepted or unaccepted way; drawn at a scale of 1"=100'.
6. A sketch plan showing potential street layout for any adjacent developable land and any developable land adjacent thereto.
  7. Owners' names and assessors map and parcel numbers of all abutting properties as they appear on the most recent Board of Assessors records; all adjacent properties in common ownership with the subject property shall be so identified and shown in their entirety.
  8. The entire extent of the existing lot or parcel of subject property, showing location of existing and proposed permanent bounds, clearly differentiated; and existing and proposed easement or right-of-way boundaries, clearly differentiated together with an indication of type and to whom rights therein have been or are proposed to be conveyed.
  9. All boundary lines, existing and proposed, shall be accompanied on the plans by sufficient data, including lengths, bearings, radii, and central angles, to determine the exact location, direction, length, and other geometric factors, of every street, way, roadway and sidewalk pavement, curblin, lot line, easement line, right-of-way line, and other boundary line, with adequate control points shown, in order to establish all such on the ground; bounds shall be set at tangent points on any boundary line. Closure calculations shall be provided for the entire parcel, proposed roadway and lots.
  10. Existing topography of the tract containing the proposed subdivision and of all lands within 100 feet of any portion thereof, with contour intervals not to exceed two feet and with spot elevations as appropriate.
  11. Existing improvements within the subdivision, including buildings, fences, stone walls or stone fences, paving, and utility lines.
  12. Locations of ponds, intermittent or constant watercourses, large boulders, rock outcroppings, and other prominent or important natural features.
  13. Locations and identifications of trees of 6-inch caliper or larger and of significant stands or groups of trees, together with indications of trees and groups of trees proposed to be saved or preserved.
  14. All deed lines within the subdivision, and deed references; existing and proposed permanent monuments or other survey control points.
  15. Name, location, right-of-way width, pavement width, sidewalk location and width of any proposed street within the subdivision and a statement as to whether such street is proposed to be offered to the Town for acceptance as a public way (without such statement, CPDC shall assume such offer is not proposed);
  16. Proposed grades in rights-of-way and on individual lots, as well as on any adjoining property or easement, necessary to accommodate the construction of all roadways, sidewalks, driveways, buildings, utilities, and drainage; a quantification of earth material to be taken into and/or away from the site shall be provided.
  17. A profile of existing and proposed grades along the centerline and each right-of-way sidelines for all proposed streets and ways.
  18. Boundaries and identifications of any existing or proposed areas dedicated or intended to be dedicated to the Town for public use.
  19. Dimensions of all existing and proposed lot, parcel, and easement lines; frontage length for each lot shall be clearly and prominently shown; a table shall be

- provided showing calculations relative to Section 5.2.1. of the Reading Zoning By-Laws; calculations of gross square footage of each existing and proposed lot or parcel, and calculations of the area of each lot or parcel not lying within any wetlands resource area; identification numbers for existing and proposed lots in sequential order. For any subdivision proposed to be located within the Aquifer Protection Zoning Overlay District, calculations of maximum allowed impervious surface area for each lot shall be shown in square feet and as a percentage of the lot size, together with the aggregate impervious surface for the entire subdivision in square feet and as a percentage of the entire subdivision parcel or parcels.
20. Minimum cellar floor elevation for each proposed habitable structure; width and location of each proposed curb-cut and driveway relative to each proposed lot and for each lot within 100 feet of the proposed subdivision.
  21. Location of all existing structures, together with parallel or perpendicular dimensions between them and the nearest points on the existing and proposed property lines.
  22. Identification of the zoning district(s) within which the subject property is located and any zoning district boundaries running through or along the property.
  23. Delineated bounds of any wetlands resource area on the property or within 200 feet of any portion of the property.
  24. The One-Hundred-Year flood profile as shown on the National Flood Insurance Program Maps issued by the Federal Emergency Management Agency.
  25. Soil conditions and soil types on the property, according to information available from appropriate governmental agencies, or when such is not adequate in CPDC's estimation, from a direct analysis performed on the site.
  26. Citation by name and case number of any variance or special permit granted by the Reading Zoning Board of Appeals relative to the subject property.
  27. Layout of existing and proposed water supply and sanitary sewer systems, including:
    - (a) the location and size, invert elevations, slopes, and construction details, of subdivision water and sewer lines, trenches, gates, valves, catchbasins, manholes, and other structures;
    - (b) water and sewer laterals to each lot with tie-ins at the property line, and invert elevation of each lateral at the property line;
    - (c) location, type, and base elevation of each existing and proposed fire hydrant in the subdivision and within 500 feet thereof;
    - (d) location, sizes, invert elevations of all existing public water and sewer lines into which the subdivision water and sewer services propose to connect.
  28. Layout of existing and proposed stormwater and surface drainage systems, including:
    - (a) the location and size, invert elevations, slopes, and construction details, of collection devices, drain lines, trenches, culverts, catchbasins, manholes, and other structures;
    - (b) location, size, elevation, and profile of detention or retention basins, outlet or other control structures, drywells, or other stormwater control device;
    - (c) location and capacity of bodies of water or streams or other drainage feature on the site or that are proposed to receive discharge from the site.

29. Location, layout, size, and construction details of appurtenant above-ground or underground devices, of such other existing and proposed underground utilities as electric, gas, cable television, telephone, or other; together with locations, types, heights, intensities, shielding, and other features of proposed street lighting.
30. Estimates and projected water use and sewage generation according to standards contained in Manual #9, "The Design and Construction of Sanitary and Storm Sewers" of the American Society of Civil Engineers, or other standards acceptable to the Town Engineer;
31. Any other notations or other information necessary or appropriate for fully explicating the plan.
32. A list of deed and plan references used to formulate the plan.

c. Way and Profile Plans:

The same form as required in Section 6.1.1.a. shall include or be accompanied by Way and Profile Plans prepared in the format set forth in Section 6.1.1.b(1), (2), and (3), which shall show the following:

1. A separate layout plan for each proposed street in the subdivision, with proposed exterior right-of-way lines, centerlines, points of tangency, lengths of tangents, lengths of curves, intersection angles, radii of curves, location of permanent monuments and benchmarks, together with all lot lines, curbs, curb-cuts, tree lawns, sidewalks, buildings, retaining walls, driveways, and other major features within forty feet of such exterior lines; size and location of all storm drains, culverts, water mains, sewers within the street and all appurtenances thereto; all water gate boxes, mains and services, shall be shown with tie-ins so that they can be located by measurement.
2. Cross-section or section of each roadway, properly located and identified by station number, at such intervals along the street as will adequately indicate any variations in its section; the section shall show sidewalks, utilities, depth of utilities, depth of gravel, depth and thickness of pavement, crown of road, and type of materials; slope of the side of the roadway to the property line, and slope of any grading within an existing or proposed lot to accommodate the roadway, shall be shown.
3. Directly above or below the layout plan for each proposed roadway there shall be drawn a profile showing for such street existing centerline grades in fine solid line, proposed exterior right side in fine long broken line, proposed exterior left side in fine short broken line, and proposed finish centerline grade in heavy solid line; proposed grade elevations shall be shown by figures at the beginning and end and at fifty-foot station intervals, except on vertical curves where they shall be shown at 25-foot station intervals; rate of gradient in percentage shall be shown; profiles shall indicate the location of any intersecting public or private ways and the location and materials of existing and proposed storm drains and lines, water mains, sewer lines, and all appurtenances thereto, together with rates of gradient for storm drain lines, water mains, and sewer lines.
4. Each of the above shall include:
  - (a) Profile of drainage showing rates of gradient;
  - (b) Center line profiles of each way shall show the elevations of intersections of tangents, fifty-foot stations, rates of slope vertical curves, and data

- (c) High points and low points of vertical curves, together with calculations;
- (d) Profiles of easements proposed to conduct utilities.

d. Other Information:

1. Designer's Certificate (Form G).
2. Drainage and Hydraulic Calculations:  
Drainage calculations and analysis for the subdivision submitted pursuant to these Regulations shall be consistent with Section 7.4.4.1.

3. Traffic Study:

A traffic study shall be performed according to the following standards:

- (a) Study Area:

Each traffic study shall be based on a study area which shall generally include proposed subdivision roadways and all existing travel ways intersected by roadways of the proposed subdivision, in each direction of travel to and including the nearest intersection of such travel ways to the nearest arterial street in each such direction. Prior to the commencement of each traffic study, the applicant or applicant's agent shall consult with the Town Planner in order to establish the study area appropriate to the proposed subdivision.

- (b) Information and Sources:

Each traffic study shall follow the standards and guidelines set forth in the latest versions of the following sources as may be superseded, updated, or amended from time to time, and be acceptable to the Town Engineer:

Site Impact Evaluation Handbook (United States Department of Transportation, Federal Highway Administration);

Traffic Access and Impact Studies for Site Development (Institute of Traffic Engineers, Recommended Practice);

Highway Capacity Manual (Transportation Research Board, Special Report 209);

Trip Generation Guidelines (Institute of Traffic Engineers).

Due consideration shall be given to sight distances, according to criteria set forth in Section 7.1.6., in the study area, high-accident locations identified by the Police Department or state agencies, proportion of peak hour traffic volume compared with average daily volume, street and intersection layout, existing traffic control devices, public transportation routes, traffic speeds, adequacy of sidewalks and pedestrian ways, adequacies of horizontal and vertical geometry and layout of streets and intersections, and other factors affecting the efficiency and safety of travel.

- (c) Data Collection: Data for all study area intersections shall include volume and turning movement counts during peak traffic hours (and during site generation peak hours if different), accident research for the past three years, stopping sight distance measurements, vehicle travel speeds, and for

- all study area travel ways identification of all locations and segments where the vertical and/or horizontal sight distances are inadequate.
- (d) Existing Conditions Analysis: The study shall develop adjustment factors from available data in order to estimate average and peak-season peak-hour traffic conditions; shall perform Level of Service (LOS) calculations at each intersection and analyze accident, sight distance, travel speed and other relevant data to identify locations with existing safety or capacity problems.
  - (e) No Build Analysis: For comparative purposes, the study shall assess future conditions without the proposed subdivision. This assessment shall reflect at minimum a five-year projection into the future, unless otherwise directed by the Town Planner in particular cases; shall be based on future traffic growth estimation rates currently in use by appropriate state or regional agencies; shall factor into the analysis known major development in, or which will have impact upon, the study area; and shall calculate Levels of Service and compare them to existing conditions. The purpose of this analysis is to establish baseline conditions against which the anticipated future impacts of the proposed subdivision can be evaluated.
  - (f) Build Analysis: The study shall calculate daily and peak-hour traffic generated from the proposed subdivision and distribution of traffic along travel ways leading from or to the subdivision; shall add all subdivision-generated traffic to the No Build Analysis and calculate respective Levels of Service and compare these to those of the Existing Conditions and No Build Analyses and thereby identify the subdivision's projected impacts.
  - (g) Mitigation of Impacts: Pursuant to Section 3.15.2. hereof, the traffic study shall propose to the CPDC mitigation measures to address the traffic impacts, if any, of the subdivision. In general, mitigation measures shall result in the restoration of projected Levels of Service to those identified in the Existing Conditions Analysis. All mitigation measures so proposed shall be considered commitments by the applicant as part of the application made pursuant to these Regulations.

4. Environmental Impact Report:

An Environmental Impact Report shall be provided in order to enable CPDC to assess the impact of the proposed subdivision on the Town's natural and social resources and on the provision of municipal services, and to ascertain the suitability of mitigation measures proposed by the applicant relative to such concerns as impact on Town infrastructure and services, recycling of stormwater into the ground, surface drainage effects, aquifer protection, water and air quality; preservation of botanical resources, wildlife habitats, historic structures, archaeological resources, geological features; existing or potential trails, greenways, and open space, recreation resources, and environmental health and safety. CPDC shall regard any actions or measures proposed herein as binding on the applicant.

The Report shall describe the following:

- (a) The subdivision and its relation to its surrounding area, including a

tabulation of the subdivision's total area with breakdowns into areas proposed to be in lots, street or roadway rights-of-way, recreational or other open space, utility or other easements; total area within the subdivision in delineated wetlands, and total area covered by impervious surfaces; proposed open space dedication or recreational facilities and whether such are to be available to subdivision residents only or to the general public; for non-residential subdivisions, the maximum gross potential floor area shall be determined;

- (b) The general physical condition of the site, including amounts and varieties of vegetation, general topography; geologic, scenic, archaeological, and historic features; trails and open space links; indigenous and rare or endangered wildlife and habitats; and how the subdivision will affect such features;
- (c) Proximity to and accessibility with respect to shopping, employment, and transportation;
- (d) The nature and extent of existing water bodies, water courses, and wetlands, including existing surface drainage characteristics, both within the site and as it flows into the Ipswich, Aberjona, or Saugus Rivers; construction methods proposed to control erosion and sedimentation; location and extent of land to be cleared during construction, together with proposed control measures, length of time of exposure, disposal of debris, estimates of volume of earth materials to be brought into or taken out of the site, covering of earth stockpiles, any phases of such work; calculations of pre-development and post-development peak runoff volumes and rates; permanent post-development methods to control erosion and sedimentation, including wetlands buffer and no-activity zones, vernal pools, intermittent streams, groundwater recharge, maximum groundwater levels, vegetative cover, protection of existing vegetative cover, conservation dedications or easements, flood control or outlet structures, on-going maintenance;
- (e) Limitations on the proposed development resulting from soil and subsurface conditions and proposed measures to overcome them;
- (f) Effects of the proposed subdivision on municipal water and sewer system capacities;

5. Test boring log:

A test boring log shall be provided showing the results of all test borings performed to a minimum depth of ten feet at three-hundred-foot intervals along the centerline of any proposed subdivision way in order to determine that the soil can properly support the proposed roadway. Where subsurface conditions are inadequate, the applicant shall submit the proposed construction technique to ensure that all roadways shall be properly built.

6. Proof of Access:

In cases where access to a proposed subdivision is over a private way or an unaccepted street, the applicant shall provide proof of entitlement to such access. A way in an unaccepted or unapproved subdivision shall not be used or

considered as access to a proposed Definitive Subdivision unless such way is improved so that it would qualify for acceptance as a public way.

7. Utilities:

(a) Water Supply and Sanitary Sewer:

The applicant shall provide data and design analysis to support the proposed subdivision water and sewer utilities, including profiles, public water system demand and capacity, capacity of the public sewer system to acceptably accommodate the proposed subdivision, and other such information as advised by the Town Engineer.

(b) Stormwater and Surface Drainage:

The applicant shall provide sufficient information certified by a Registered Professional Engineer to indicate detailed volumes, rates, flows, and similar factors, that would be generated by the subdivision and accommodated by the drainage system; to show that the receiving waters, streams, or devices as far as the nearest downstream open, flowing channel or brook can accommodate the proposed drainage, and other such information as determined by the Town Engineer.

(c) Electrical Service and Street Lighting:

The applicant shall provide documentation showing that the Reading Municipal Light Department shall provide underground electrical service to the proposed subdivision and that said Department has approved electrical plans for all electrical service, including street lighting, in the proposed subdivision.

8. Other Documentation:

(a) If the applicant wishes to have some portion of such land designated in the proposed subdivision as not a part of the subdivision, the applicant shall provide as part of the application a letter from the Building Inspector determining that such portion is a legally separable and buildable lot.

(b) A copy of each existing easement, covenant, or restriction applying to the area proposed to be subdivided and applying to any area outside such area but proposed to be utilized for any aspect of the proposed subdivision work.

(c) Sufficient survey data to confirm the determination of all existing and proposed property, easement, or right-of-way boundaries.

(d) If any subdivision street is proposed to remain in private ownership, the applicant shall propose provisions, acceptable to CPDC, for perpetual maintenance of such streets and to notify any successors in interest in the subdivision or any part thereof that the Town shall not be responsible in any way for any aspect of maintenance of such street.

(e) Identification of any structure in the proposed subdivision or within 500 feet of any portion thereof which is listed on the National Register of Historic Places or any similar state or local listing.

(f) Proposed draft of any performance guarantee according to Section 9.2 hereof.

## **6.2. Review and Decision Process:**

### **6.2.1. Review:**

If CPDC finds that the application is not complete and properly submitted, CPDC may deny the application without prejudice. If CPDC finds the application to be complete and properly submitted, CPDC shall consider the plan at a public hearing within the following number of days of the submittal of such plan and notify the Town Clerk of its action relative to the plan within the following number of days after the submittal of the application or such further time as may be agreed upon at the written request of applicant:

- a. 90 days, if a Preliminary Plan, substantially similar to the relevant Definitive Plan, has been submitted by the applicant and acted on by CPDC within the previous two years relative to exactly the same proposed site, or
- b. 135 days, if no Preliminary Plan, or one substantially dissimilar to the relevant Definitive Plan, or one submitted by a different applicant, or one relative to a different site or different bounds thereof, or one submitted to and acted on by CPDC more than two years prior to the submittal of the relevant Definitive Plan, had been submitted.

### **6.2.2. Decision:**

By vote of a majority of the Commission's full membership, CPDC shall take one of the following actions:

- a. Disapproval, or denial, of the plan, stating the reasons therefor; CPDC may also provide advice to the applicant relative to any subsequent Definitive Plan for the proposed subdivision, or
- b. Approval of the plan, or
- c. Approval of the plan with specified modifications and/or stated conditions.

### **6.2.3. Criteria for Decision:**

CPDC shall approve a Definitive Subdivision Plan, if, solely according to its considered judgment, it finds that such Plan, together with all accompanying documents and information, constitutes a proposal which:

- a. Conforms entirely with all provisions of the Subdivision Control Law;
- b. Conforms to the recommendations of the Board of Health;
- c. Meets all stated requirements and standards of these Regulations, with the exception of any waiver therefrom which has been requested in writing by the applicant in accordance with Section 3.8. hereof and which CPDC specifically grants as part of its action with respect to the application;
- d. Satisfies in full all purposes of these Regulations set forth in Section 1.2. hereof;
- e. Conforms in every respect with the requirements of the Reading Zoning By-Laws as the same may be conditioned by special permit or modified by a variance;
- f. Is suitable for the land on which it is proposed to be placed;
- g. Has properly, accurately, and completely identified its effects on all matters of concern to legal parties of interest and to the general public, as specified in these Regulations, and sets forth when required by the CPDC and where appropriate mitigation measures which the applicant is obligated to carry out and which are reasonable and appropriate to address and overcome such effects;
- h. Does not omit adjacent property which is owned by the applicant and which the Building

- Inspector has not determined to be a legally separate and buildable lot;
- i. Does not cause any existing structure on the subject property to become non-conforming under the Reading Zoning By-Laws or increases any existing non-conformity;
  - j. Contains a street system which connects directly with one or more existing accepted public ways;
  - k. Does not cause a street intersection within the study area as defined in Section 6.1.1.d.3., to fall below a Level of Service (LOS) of D, nor discharges traffic into an intersection already operating at a Level of Service of F without reasonable mitigation;
  - l. Includes an offer to the Town to accept all common water and sewer utilities, and proper easements therefor, in the subdivision;
  - m. Has available to it adequate public water supply in terms of quantity, quality, and water pressure without adversely impacting such availability to other developed properties;
  - n. Has available to it adequate capacity in the public sewer system to accept the discharge from the proposed subdivision without adversely affecting other developed or undeveloped properties;
  - o. Has available to it adequate storm drainage capacity to accept stormwater runoff from the subdivision without adversely affecting other developed or undeveloped properties;
  - p. Does not have any street name or locational designation which in the opinion of the Fire Chief may be confused in emergency situations with the name of any existing street name or locational designation in the Town;

#### **6.2.4. Revocation of Denial:**

Within sixty days of the notification to Town Clerk of the disapproval, or denial, of a Definitive Subdivision Plan, the applicant therefor may submit to CPDC an amended plan. If CPDC finds, through public hearing duly noticed in accordance with Subdivision Control Law, that:

- a. the amended plan is substantially similar to the disapproved plan,
- b. it fully addresses the reasons for such disapproval,
- c. it is in full conformity with these Subdivision Regulations, and
- d. it fully satisfies all criteria specified in Section 6.2.3. hereof,

then CPDC may revoke said disapproval and grant an approval, with or without conditions, of the amended plan.

The applicant shall submit such amended plan and applicable fee in accordance with Sections 3.5.1.2., 3.5.2., and 3.6.3.3. hereof, providing replacement drawings and, to the extent that information filed with the original application has been modified, revised accompanying documents and information relative to the proposed modifications or amendments.

If the amended plan is not submitted within said sixty days or if the plan is not substantially similar, in the judgment of the Town Planner subject to appeal to CPDC, then it shall be considered to be a new application.

#### **6.2.5. Modifications to an Approved Definitive Plan:**

CPDC may consider modifications to an approved Definitive Subdivision Plan, upon written request (in sixteen copies) of an applicant accompanied by sixteen copies of plans and other information sufficient to explain such modification clearly. CPDC shall determine, in its sole judgment, whether such modification is minor or major.

If minor, CPDC shall consider the substance of the request at a public meeting at its earliest convenience, and if it finds any or all modifications requested to be acceptable according to the standards set forth in these Regulations, CPDC may grant, with or without conditions, approval to any such modification; if it finds any modification so to be unacceptable, it shall deny such modification; in either case it shall notify Town Clerk of such decision within seven days thereafter.

If major, the procedures specified in Sections 3.5.1.2., 3.5.2., 6.2.1., 6.2.2., and 6.2.3., as applicable shall be followed, with the exception that no inspection fee shall be payable for a modification; however, an application fee as set forth in Section 3.6.3.3. shall be payable. If a major modification is approved, the applicant shall, within thirty days of the decision thereon, supply to CPDC three copies of revised plans fully reflecting such modification and bearing a reference to the original subdivision plan.

#### **6.2.6. Modification or Rescission:**

##### **6.2.6.1. Modification or Rescission by Other than the Applicant:**

CPDC on its own motion or on the petition of any person interested, shall have the power to modify, amend, or rescind any approved Definitive Subdivision Plan, or to require a change in a plan as a condition of its retaining the status of an approved plan, in accordance with MGL Chapter 41, Section 81W.

In addition to the above, CPDC may consider rescinding approval of a Definitive Subdivision Plan on the following grounds:

- a. If no guarantee for required improvements is provided and the plan is not recorded within six months following the expiration of the twenty-day appeal period or the settlement of any appeal, whichever occurs later;
- b. If the required subdivision improvements have not commenced within one year of the recordation of the Definitive Subdivision Plan; or
- c. If work on the required subdivision improvements is not completed within two years of the recordation of the Definitive Subdivision Plan, or by the end of any extension period requested in writing by the applicant prior to the end of such two-year period and granted by CPDC.

##### **6.2.6.2. Rescission for Noncompliance with Plans, Conditions, or Other Requirements:**

CPDC shall consider any variation from the approved Definitive Subdivision Plans or any other noncompliance to be sufficient cause for the applicant to be found in breach of the Definitive Subdivision Plans.

Should CPDC find an applicant so to be in breach, it may rescind its approval and require the immediate cessation of all work on the property or, at CPDC's discretion, it may utilize the bond or other form of surety held in connection with such subdivision to remedy such breach.

## **7.0 DESIGN STANDARDS**

### **7.1. General Requirements of Streets:**

All of the following street requirements shall apply unless waived or varied by the CPDC:

- a. All streets which are part of the main highway system shall be coterminous with adjoining links and at the same or greater widths, except as hereinafter specified.
- b. Ways shall be continuous and, where possible, in alignment with existing ways. All proposed ways shall compose a convenient system with adequate connections to ensure full movement of vehicular travel.
- c. If adjoining property is not subdivided, consideration shall be given to the possibility of future connections. In any case where developable land, whether publicly or privately owned, adjoins the subdivision, proposed ways shall continue to the exterior boundary of the subdivision unless otherwise approved by the CPDC.
- d. All roadways shall be designed in accordance with the recommendations of the American Association of State Highway and Transportation Officials (AASHTO).

#### **7.1.1. Width and Grade of Ways**

- a. The width of street rights-of-way shall be sixty (60) feet. Cul-de-sac terminations of street rights-of-way shall consist of a right-of-way circle with a radius of sixty (60) feet, the center of which radius shall coincide with the centerline of the roadway. Where appropriate for the needs of vehicular access and public safety, the CPDC may require a greater right-of-way width or radius.
- b. Grades of all streets shall be the reasonable minimum, but not less than one percent (1%) nor more than six percent (6%) for principal streets, nor more than ten percent (10%) for minor streets. General slope of grades at all intersections shall be a maximum of two (2) percent for a distance of at least sixty-four (64) feet from beginning of intersection. Proposed roads shall have a slight negative grade when intersecting with existing roads at or within 50 feet of the beginning of the intersection.

#### **7.1.2. Horizontal and Vertical Alignment**

- a. All angles in street lines shall be eased with curves having a center line radius of one hundred (100) feet minimum. Center lines of opposing streets shall be spaced a minimum of one hundred and fifty (150) feet apart. Reverse curves shall be separated with tangents having a minimum length of seventy-five feet.
- b. The transitions in longitudinal grade of every way shall be effected by means of vertical curves of sufficient length, in the opinion of the Town Engineer, to provide adequate sight distance.
- c. Changes in grade or vertical curves of streets shall be designed according to the recommendations of AASHTO based on a design speed of 30 mph for a minor or secondary street and 40 mph for main thoroughfares or through streets.

#### **7.1.3. Street Cross Section**

The following shall be the minimum provided for streets. The Commission may require additional lanes, widths, and other dimensions where the use requires such increases. Cross sections shall conform to Figure 1, "Typical Cross Section for a Sixty-Foot Street", in the Appendix.

- a. At least a 30 foot travel way completely paved and uniformly graded from the crown of the roadway to the granite curbing at three-eighths of an inch (3/8") per foot;

- b. The dimensions of the roadway, curbing, tree lawns, and sidewalks shall conform to the cross section shown in Figure 1;
- c. A pole and associated overhead structures, for use for police and fire alarm boxes and any similar municipal equipment or for use of street lighting, of a design approved by the Commission, shall be installed at each intersection and at such other locations as designated by the Commission;
- d. All utilities shall be underground; poles for street lighting shall be located at least three feet from the outer edge of the travel way. Under no circumstances shall any guy wire or posts be located in the paved portion of the sidewalk area.
- e. In no case shall side slopes outside of the exterior street lines steeper than three feet horizontal to one foot vertical (3:1) be constructed except in rock or definite ledge formation, where the maximum allowable slope shall be one foot horizontal to one foot vertical (1:1). These maximum slopes shall apply from the street lines to the finished grade of adjacent lots. Temporary slope easements will be taken where applicable and any unsuitable material will be removed to the depth and width approved by the Director of Public Works.
- f. Where construction of required slopes is impractical, retaining walls shall be constructed as directed with approval of the Building Inspector. Retaining walls shall be constructed adjacent to the back edge of the sidewalk outside of the right of way line with all necessary temporary easements. Retaining walls shall be of field stone masonry construction as specified in 1988 MDPW "Standard Specifications for Highways and Bridges," Section 685, Field Stone Masonry.

#### **7.1.4. Intersection of Ways**

- a. The grading at intersections shall be designed to provide both safe and convenient travel.
- b. All intersections of ways shall be at an angle of ninety (90) degrees if possible, but otherwise at an angle approved by the CPDC. In no case shall angles at intersections be less than sixty (60) degrees. Curb lines at all intersections shall provide a radii of not less than thirty (30) feet.
- c. The number of ways converging at any one point shall be kept to a maximum of four (4).

#### **7.1.5. Dead End Streets/Cul-de-sacs**

- a. Any proposed street which intersects solely with a dead end street or cul-de-sac shall be deemed to be an extension of the existing dead end street or cul-de sac. No dead end street or cul-de-sac and their extensions, shall be longer than five hundred (500) feet. Dead end streets and cul-de-sacs shall be measured between the sideline of the nearest intersecting through street and the center of the turning circle. Cul-de-sacs shall be provided with a turning circle having an outside pavement radius of forty-five (45) feet.
- b. The maximum slope of the turning circle shall be three percent (3%) as measured along the center line of the turning circle.
- c. Those dead end ways which shall eventually carry traffic to another way shall have a temporary turning circle having an outside pavement radius of not less than forty-five (45) feet. Areas within the temporary circle that may be abandoned or conveyed as part of an adjacent lot or continuation of the way, shall be appropriately designated and dimensioned as separate parcels of land. A note shall be added to the plan designating to which lot each parcel will be added to and become a part of upon extension of the way (MGL Chapter 41). Additionally, the plan shall provide notation that such parcels are not

to be considered buildable by themselves, and, that such parcels do not constitute the minimum lot area requirements for adjoining lots at the time of submission of the Definitive Plan.

- d. If developable land, whether publicly or privately owned, adjoins the subdivision, temporary dead end streets shall be laid out to the perimeter of the subdivision to permit future extension and shall conform to the provisions of alignment, width, and grade that would be applicable to such streets, if extended. Easements for temporary turnarounds outside of the way lines shall be provided. Such easements shall terminate in the manner provided in MGL Chapter 41, Section 81Q. Such turnarounds shall be constructed to the same standards as permanent turnarounds. Frontage for lots abutting a temporary turnaround shall be computed along the way lines.
- e. An island within the cul-de-sac shall be required; it shall have a maximum outside radius of twenty (20) feet. Parking shall be prohibited around the cul-de-sac to ensure adequate emergency access. A planting plan of the island must be submitted with the definitive plan as well as a method by which the island will be maintained.

**7.1.6. Sight Distance**

- a. The minimum stopping sight distance for horizontal and vertical curves (as measured from a height of eye of 3.5 feet to an object height of 0.5 feet) shall be in accordance with the following:

<u>Design Speed</u>	<u>Sight Distance</u>
20 mph	120 feet
30 mph	200 feet
40 mph	325 feet
50 mph	475 feet
60 mph	650 feet

- b. Corner intersection sight distance (as measured from a point of the minor road at least fifteen (15) feet from the edge of the major road pavement and measured from a height of eye of 3.5 feet on the minor road to a height of object of 4.25 feet on the major road) shall be in accordance with the following:

<u>Design Speed</u>	<u>Sight Distance</u>
20 mph	200 feet
30 mph	300 feet
40 mph	400 feet
50 mph	500 feet
60 mph	600 feet

**7.1.7. Curbing**

- a. Vertical granite curb shall be used throughout the subdivision. It shall be Type VA-4 as defined in the 1988 Commonwealth of Massachusetts Department of Public Works "Standard Specifications for Highways and Bridges."
- b. Granite curb inlets shall be provided at all catch basins.
- c. Granite curb corners (Type B) shall be provided at all driveways.
- d. Granite transition curb shall be provided at all wheelchair ramps.

### **7.1.8. Monuments**

- a. Granite monuments shall be set at all intersection, angle points and points of change in direction or curvature of streets.
- b. Granite monuments shall be four (4) feet long by six (6) inches square with the top hammer-dressed to a six (6) inch by six (6) inch area. Such monuments shall be set with their top at the proposed surface grade, unless the Town Engineer otherwise directs, and shall be set in bank run gravel. A three-eighths (3/8) inch diameter by a one (1) inch deep hole shall be drilled in the top of all stone bounds or monuments.
- c. The subdivider shall set granite monuments, or other permanent markers as specified by the CPDC, at all points designated on the definitive plan. A certificate shall be required from the Registered Land Surveyor, certifying that "the bounds are set, and have been rechecked after a reasonable time and are now in correct position." This certificate is filed in duplicate with the Town Engineer and CPDC before requesting release of a bond or other performance guarantee.

### **7.1.9. Signs**

The developer shall furnish, set in concrete, and erect street signs to designate the name of each street in his development prior to the occupancy of any house on the street. Said signs shall conform to the specifications of those used by the Town and shall be located as directed by the Department of Public Works.

### **7.1.10. Street Names**

Proposed names of all streets in the subdivision must be approved by the Commission.

### **7.1.11. Street Lighting**

Proposed street lighting shall be shown on the Definitive Subdivision Plan. The developer shall work with the Reading Municipal Light Department (RMLD) to develop a lighting scheme that is acceptable to the Engineering Division. The RMLD shall make the final decision on the actual physical location of street lights.

The developer shall be responsible for subdivision street lighting operating costs in accordance with the Board of Selectmen's policy, as amended, on this matter.

## **7.2. Sidewalks:**

- a. Sidewalks shall be constructed on both sides of the street. Bituminous concrete shall be used in all areas of Town except for the area generally bounded by Lowell, Salem, John, Washington, Willow, Summer and Prescott Streets (see figure 2, "Area Requiring Cement Concrete Sidewalks") where cement concrete sidewalks shall be used.
- b. Bituminous concrete sidewalks shall consist of eight (8) inches bank run gravel, a one and one half (1-1/2) inch binder course and a one and one half (1-1/2) inch finish course.
- c. Cement concrete sidewalks shall consist of eight (8) inches bank run gravel and four inches of cement concrete pavement along walkways and six inches of cement concrete at driveway openings.
- d. Wheelchair ramps shall be provided on all sidewalks at street intersections and at any other location the Commission deems necessary. Wheelchair ramps shall conform to the applicable sections of the Federal Americans with Disabilities Act and/or Commonwealth

of Massachusetts Architectural Access Board requirements, whichever are more stringent.

### **7.3. Driveways:**

Pursuant to the Board of Selectmen's current driveway policy, after approval of the subdivision, the applicant must apply to the Engineering Division for a driveway permit (plot plan used for building permit is acceptable) for each lot within the subdivision. The plan shall indicate all trees, hydrants, poles, etc., as well as the gutter grade, property line grade and proposed grades in sufficient detail to ensure compliance with the requirements of the Board of Selectmen's policy, as amended, regarding residential driveway openings.

### **7.4. Utility Systems:**

All utility systems shall be laid out as shown in Figure 3 (“Utility Layout for Sixty-Foot Streets”).

In utility easements, no line shall be placed closer than five feet to any sideline of the utility easement or closer than six feet horizontally to any other line; where lines cross one another, water lines shall be placed higher than any other line, separated vertically from any other line by at least eighteen (18) inches.

#### **7.4.1. Water Supply System**

- a. Town of Reading public water shall be supplied to all houses within the subdivision.
- b. All water mains shall be looped unless waived by the CPDC and the Board of Health. Reasonable provisions shall be made for extension of the water main to adjoining property, including installation of water gates if necessary. Appropriate easements for such facilities shall be required.
- c. All water supply systems shall be constructed of minimum eight (8) inch diameter cement lined ductile iron (CLDI) pipe. Five feet of cover shall be maintained over the water pipe at all times. All water pipes, laterals, and other related equipment such as hydrants and main shutoff valves shall be designed in accordance with the requirements of the Department of Public Works and shall be installed under the direction and supervision of the Department of Public Works. The water main must pass a specific pressure test and be chlorinated by a certified company acceptable to the Director of Public Works prior to turning the main into the system.

#### **7.4.2. Sewer System**

- a. All houses within any subdivision shall be tied into the Town of Reading public sewer system. The sewer system shall be located in the center of the proposed roadway. Wherever possible, a gravity sewer system shall be provided such that all basements may be served by the system. The system shall be designed to the following criteria:
  1. Minimum sewer pipe size shall be eight (8) inches
  2. All sewer pipes shall be SDR 35 Polyvinyl Chloride (PVC) pipe. In areas where cover is less than four feet, Schedule 40 PVC shall be used.
  3. Wherever possible, sewer pipes shall have a minimum of seven (7) feet of cover.
  4. Manholes shall be provided at points of change in grade, change in direction, change in size of pipe or at points of entrance to the system by pipes over four (4) inches in diameter. Maximum spacing of sewer manholes shall be 300 feet.

5. All manholes shall be of precast concrete with rubber boots for pipes cast into the structure. Manholes shall have a minimum inside diameter of four (4) feet.
  6. All service connections shall be four inch PVC connected to the sewer with a wye branch or chimney as necessary.
  7. Manhole frames and covers shall be Town of Reading standard.
- b. All sewer pipes must be subjected to an air exfiltration test prior to acceptance by the Town. The test must be conducted by an independent testing company. Each segment of pipe (including laterals) must hold five (5) pounds of air pressure for fifteen (15) minutes.

#### **7.4.3. Fire Hydrants and Alarm Systems**

- a. The placement of fire hydrants will be subject to the approval of the CPDC. Fire hydrants sufficient in number and located so the arc of a five hundred (500) foot radius from a hydrant extends not less than two hundred (200) feet into any lot, must be provided. Each hydrant must be provided with an adequate flow of water as required by the Reading Fire Department and Department of Public Works.
- b. Fire alarm signal equipment shall be installed within subdivisions when deemed advisable by the Fire Chief. Such equipment will be dedicated to the Town along with other utilities.

#### **7.4.4. Storm Drainage**

##### **7.4.4.1. Drainage Study and Methodologies**

- a. The applicant must submit a drainage report that summarizes the impact of the project on storm water runoff. The subdivision should be analyzed under pre-development and post-development conditions for the two (2), ten (10), twenty five (25) and one hundred (100) year storm events. Acceptable methods for conducting this analysis include Technical Release No. 55 (TR-55) "Urban Hydrology for Small Watersheds; Technical Release No. 20 (TR-20) "Computer Program for Project Formulation - Hydrology; the Rational Method (for very small watersheds); or other methods if approved by the Town Engineer.
- b. All projects must incorporate the requirements of the Commonwealth of Massachusetts, Department of Environmental Protection, Stormwater Management Policy issued on November 18, 1996 and any future amendments to that policy. The DEP Policy will apply to all proposed subdivisions including those of four lots or less.
- c. The report shall include the following information (if applicable):
  1. USGS map of the project area showing the project site, receiving water bodies, general storm water flow patterns, and drainage area delineations (if possible);
  2. A brief summary (one paragraph) of the methodology selected;
  3. A brief project description;
  4. A Soil Conservation Service map of the project site;
  5. A summary of the soils and their hydrologic soil group;
  6. Pre- and post-development drainage area delineations (no larger than 11"x17");
  7. A pre- and post-development runoff summary including peak rates and volumes of runoff;
  8. A flow chart that clearly explains hydrograph addition, detention basin routing, etc. for both pre- and post-development conditions; and

9. All backup documentation such as curve number and time of concentration calculations, computer printouts (appropriately labeled so that the process may be easily followed), and the like.
- d. It is the applicant's responsibility to provide appropriate mitigation to prevent increases in the peak rates and volumes of storm water runoff. If infiltration systems of any type are proposed, deep hole tests and percolation rate information must be submitted for those locations.

#### **7.4.4.2. Detention Basin Design Standards**

Detention basins have become the standard mitigation measure for reducing peak rates of storm water runoff. In order to improve the aesthetics of these facilities, applicants are encouraged to be creative in the use of detention basins. Careful planning can result in a detention basin that is an amenity to a project and a neighborhood rather than an eyesore. To encourage better design of detention basins, the following standards shall be used:

- a. Detention basin side slopes shall not exceed four (4) feet horizontal to one (1) foot vertical (4:1);
- b. The depth of the detention basin shall not exceed four (4) feet;
- c. The basin shall be designed to completely drain within 48 hours of a storm event (unless it is designed as a wet basin);
- d. A low flow channel with a slope of one (1) percent should be provided to route frequent storm events to the outlet structure;
- e. The outlet structure should be as maintenance free as possible;
- f. A trash rack or other device should be provided at the outlet structure to prevent clogging of the system;
- g. The basin should be shaped to fit in with the surrounding topography (i.e., natural shapes rather than geometric shapes); and
- h. No portion of any basin shall be closer than ten feet to any street right-of-way, ten feet to any structure, and ten feet to any property line defining the subdivision.

#### **7.4.4.3. Storm Water Collection System Design Standards**

Storm water collection systems shall be designed to efficiently dispose of storm water runoff from streets within the subdivision. Storm water collection systems shall be designed using the same methodology as used in the drainage study. The collection system shall be designed in accordance with the following requirements:

- a. All drainage pipes shall be designed to carry the storm water flows associated with the 25 year storm event;
- b. All culverts under roadways shall be designed to carry the storm water flows associated with the 25 year storm event under open channel flow conditions. The culvert must also be analyzed to determine the impact of flows up to and including the 100 year storm event. In no case shall the proposed culvert cause flood damage to any property or cause the roadway to overtop;
- c. Catch basins shall have four (4) foot sumps and be installed at all intersections, including those with existing Town streets, at all low points, at a maximum spacing of 300 feet from other catch basins or from roadway crests. A gutter analysis determining the adequacy and locations of each catch basin shall be submitted to the Town Engineer for approval.

- d. Manholes shall be provided at points of change in grade, change in direction, change in size of pipe or at points of entrance to the system by pipes over four (4) inches in diameter. Maximum spacing of drain manholes shall be 300 feet;
- e. Drainage pipes shall be of reinforced concrete of properly engineered sizes and strength as approved by the Town Engineer and shall have a minimum of four (4) feet of cover in paved or other vehicular roads and a minimum of three (3) feet of cover in easements;
- f. Storm drain capacities shall be calculated by the Manning formula;
- g. Storm drain velocities shall not be less than 2.5 feet per second (fps) nor more than 10.0 fps;
- h. Street drainage pipes shall be a minimum of 12 inches in diameter. Culverts shall be a minimum of 18 inches in diameter;
- i. Storm water runoff calculations shall be submitted for each section of drain or culvert;
- j. All surface drainage shall terminate into flowing water or into a rip-rapped ditch section if on the subdivided land or into a ditch section connected to flowing water except when in the opinion of the Commission, such termination is undesirable; and
- k. The minimum slope of all storm or surface water drains shall be 0.5 percent.

## **7.5. Easements:**

### **7.5.1. Utility Easements**

Easements for utilities centered on rear or side lot lines shall be provided where necessary and shall be at least thirty feet in width. Easements shall be appropriately graded and cleared to enable access for maintenance of utilities.

### **7.5.2. Drainage Easements**

Where a subdivision is traversed by a water course, drainage way, channel or stream, the Commission requires that there be provided a drainage easement or right-of-way of adequate width (minimum 30 feet) to conform substantially to the lines of such water course, drainage way, channel or stream, and to provide for construction or other necessary purposes.

### **7.5.3. Sight Easements**

Sight distance easements a minimum of 20 feet wide will be required at all street intersections. Such easements are to eliminate the installation of solid fences and shrubbery or any obstruction which would impair the sight distance.

### **7.5.4. Slope Easements**

A 20 foot slope easement shall be provided beyond the layout of the road for appropriate grading behind the sidewalk.

## **7.6. Street Trees and Other Plantings:**

### **7.6.1. Street Trees:**

The developer shall install street trees as follows:

- a. All street trees shall be planted in the tree lawns as set forth in Section 7.1.3.
- b. The distance between trees shall not exceed 30 feet along the way.
- c. All trees to be planted shall have a minimum height of 12 feet and shall be of at least 2 inches caliper measured at a height of 42 inches from ground level.
- d. The specie and variety of the trees to be planted shall be selected and approved by the Tree Warden.

- e. No evergreen trees such as pine, fir, spruce or hemlock shall be planted as public shade trees along a way.
- f. No trees or shrubs shall be planted at any corner or intersection where they could become a traffic hazard by obstructing vision or preventing safe vehicular travel.
- g. All cut bankings that tend to wash or erode shall be planted with a low growing evergreen shrub such as laurel mugho pine or juniper and seeded with a deep rooted perennial grass to prevent erosion.
- h. All trees shall be planted in one-half (1/2) cubic yard of loam mulched with four (4) inches of chips and shall be properly wrapped and guyed in a manner to ensure their survival.
- i. In a subdivision the developer will be liable for all planted trees as to their erectness and good health for two years after planting as determined by the Tree Warden.

## **7.6.2. Tree Preservation:**

### **7.6.2.1. Scope of Work:**

- a. After the cutting of vegetation and rough grading for subdivision roadways but prior to any cutting of vegetation and grading of any lot, the subdivision developer and representative(s) of the Town of Reading delegated by CPDC, including any member of CPDC, the Town Planner, and/or the Tree Warden, shall meet on the subdivision site to review which existing site trees shall be saved for one or more lots. Before this meeting the developer shall have staked the corners and property lines of all lots and the corners of all proposed dwelling locations, and the developer shall have clearly marked with red flagging each tree or group of trees the developer proposes to save. At this meeting, said CPDC representative(s) shall approve or amend on site such marked trees and any others they shall deem appropriate to be saved, which shall immediately be similarly marked by the developer. Should the developer object or take issue with any determination of the CPDC representative(s), the developer may appeal such determination to the full CPDC.
- b. Prior to the commencement of any lot grading, the developer shall erect around all such marked trees barriers consisting of at minimum 1-inch x 1-inch or similarly sturdy stock for shielding around the trunks of such trees; these barriers shall be located no closer than six (6) feet from the trunk of each such tree or one-half (1/2) the distance from the trunk to the drip line of each such tree, whichever is greater. Also prior to the commencement of any lot grading, the developer shall prepare a Record Plan showing the approximate location, size, and type of all such marked trees to be saved and submit such Plan to the Tree Warden for verification. Any modification to the Record Plan may be made with the agreement of the above parties.
- c. The Town Planner shall not authorize the release of any lot within the subdivision for construction and the Building Inspector shall not issue a building permit for any lot within the subdivision until certification is received from the Tree Warden that these conditions have been complied with.
- d. Large property areas, shown on the approved Definitive Subdivision Plans to be outside the Limit of Work lines, containing protected trees to be saved and separated from construction or land clearing areas, street rights-of-way, or utility rights-of-way or easements may be marked in lieu of the above by placing stakes a minimum of three (3) feet high and not more than fifty (50) feet apart and by tying highly visible ribbon, plastic tape, rope, or the like from stake to stake along the outside perimeters of such areas.

### **7.6.2.2. Tree Replacement:**

The developer shall provide replacement trees on each lot at the ratio of at least one such tree for each 2,000 square-feet of open area on such lot. Such open area shall be calculated as the total area of the lot less the proposed impervious area on the lot as set forth in the hydraulic calculations submitted with the Definitive Subdivision Plan. Any trees left in good growing condition, as judged by the Tree Warden, on the site may be counted toward this requirement. Selection of replacement trees in regard to their number, size, and species, shall be determined by CPDC upon the recommendation of the Tree Warden on the basis of an analysis of tree canopy cover, soil conditions, and other relevant factors.

**7.6.2.3. Prohibition of Activity or Disturbance:**

Within the areas marked according to this Section 7.6.2. there shall occur:

- a. No grading or earth disturbing activities except handwork,
- b. No movement of equipment,
- c. No storage of fill, equipment, debris, supplies, or any other materials

**7.6.2.4. Enforcement:**

The Tree Warden, the Town Planner, or any CPDC member shall conduct periodic inspections of the site during land clearance and construction in order to ensure compliance with these conditions. Should the Conservation Administrator, Building Inspector, Town Engineer, Police Officer, or any other Town official observe violations or possible violations of these conditions, such official shall immediately report same to the Tree Warden or the Town Planner.

**7.6.2.5. Remediation:**

- a. Any tree shown on the above-mentioned Record Plan as to be saved which, however, is removed or whose survival is irredeemably jeopardized in violation of these conditions shall be replaced in a manner to be determined solely by CPDC on advice of the Tree Warden in accordance with the following guidelines:
  - 1. Each such removed or jeopardized tree of less than 6-inch caliper shall be replaced in kind by a tree of not less than 2-inch caliper in as close to the original location as possible,
  - 2. Each such removed or jeopardized tree of a caliper between 6 inches and 12 inches shall be replaced in kind by two trees of not less than 4 inches caliper in as close to the original location as possible,
  - 3. Each such removed or jeopardized tree of greater than 12-inch caliper shall be replaced in kind by two trees of not less than 6-inch caliper at locations determined by CPDC with advice of the Tree Warden.
- b. Failure by the developer to comply with these conditions expeditiously may result in CPDC rescinding its approval of the Definitive Subdivision Plans in accordance with Section 6.2.6.2. and causing the revocation of any or all construction and/or occupancy permits issued in connection with the subdivision; in addition the CPDC reserves the right to withhold from bond reductions or releases in connection with the subdivision sufficient sums to cover the Town's costs of remediation.

**7.6.2.6. Tree Survival:**

Should any tree subject to these policies or regulations require replacement, as determined by the Tree Warden, within the periods set forth in the following table, the developer shall immediately after such determination replace such tree in accordance with the guidelines set forth in

paragraph 7.6.2.5. above, or in kind if the tree had been a replacement:

- a. less than 4-inch caliper: one year
- b. 4-inch to less than 6-inch caliper: two years
- c. 6-inch caliper or more: three years

**7.6.2.7. Emergencies:**

When it is necessary to expedite the removal of damaged or destroyed trees in the interest of public health, safety, or general welfare, the Tree Warden may, after defining the geographic area of the emergency, suspend the requirements of these conditions for a period of up to thirty (30) days in the defined area, provided that the Tree Warden report the emergency to CPDC at its next scheduled meeting.

## **8.0. CONSTRUCTION OF WAYS:**

The following minimum specifications shall govern the installation of all streets and roadways within the rights-of-way lines in the Town under these Rules and Regulations governing the Subdivision of Land.

The construction of these facilities shall be made only during weather and under condition allowing for the fulfillment of good construction standards and shall meet fully the Specifications of the Department of Public Works.

### **8.1. Roadways:**

#### **8.1.1. Clearing and Grubbing**

The entire area of each right-of-way and side slopes shall be cleared of all stumps, brush, roots, boulders, and like material and all trees not intended for preservation. Trees to be preserved shall be protected from bruises and other abuses continuously throughout the construction of the subdivision in a manner satisfactory to the Tree Warden as set forth in Section 7.6.2.

#### **8.1.2. Excavation and Subgrade Preparation**

- a. All top soil shall be removed for the full length and width of the paved roadway, and from under the sidewalk and side slope location regardless of whether or not finished grade is above existing grade.
- b. All other material shall be removed for the full length and width of the roadway to a depth of at least sixteen and one half (16-1/2) inches below the finished grade as shown on the profile; provided, however, that if the soil is soft and spongy or contains undesirable material, such as clay, sand pockets, tree stumps, or any other material detrimental to the subgrade, a deeper excavation below the subgrade shall be made as required by the Director of Public Works, including excavation for the stabilization of side sloping.

#### **8.1.3. Grading**

All roadways shall be brought to a finished base grade as shown on the profiles of the Definitive Subdivision Plan with gravel as specified in Section 8.1.4 to a width of fifteen feet wider on each side than the required paved roadway. The roadway crown shall have a minimum slope of 3/8 inch per foot to the granite curbing.

#### **8.1.4. Gravel Base**

After the roadway has been carefully graded to an elevation sixteen and one half (16-1/2) inches below the finished grade, 12 inches of base bank run gravel, after compaction, shall be spread and rolled with a roller or sufficient weight to achieve 95 percent compaction of gravel. Gravel shall be in conformance with the most recent Massachusetts Department of Public Works (MDPW) "Standard Specifications for Highways and Bridges" and shall consist of hard, durable stone and coarse sand practically free from loam and clay, uniformly graded and containing no stone having any dimension greater than four (4) inches or as specified by the Director of Public Works. When spread on the road and rolled, it shall form a stable foundation.

#### **8.1.5. Pavement**

Pavement shall consist of four and one half (4-1/2) inches thickness, after compaction, of Class I, Type I-1, plant mixed bituminous concrete, composed of materials and prepared in conformance

with the most recent MDPW "Standard Specifications for Highways and Bridges". It shall be applied in three courses, two (2) inches thick binder course that will serve as the pavement surface until all utilities and connections have been made and accepted by the Town, then a one (1) inch thick leveling course and a one and one half (1-1/2) inch thick top course. Spreading and rolling shall also be in conformance with the above referenced Specification.

No pavement shall be placed or installed between December 1st and April 1st.

## **8.2. Sidewalks:**

The profile, dimensions and location of sidewalks shall be as shown in the Typical Section (Figure 1). Sidewalks shall be installed in accordance with either 8.2.1 for cement concrete or 8.2.2 for bituminous concrete.

The radius corners will not have any tree lawn but will have sidewalks extended to meet the straight granite curbing. Wheelchair ramps shall be installed at all street intersections and at any other location as determined by the Commission.

### **8.2.1. Cement Concrete**

The foundation shall be at least eight (8) inches of well-compacted bank run gravel. The concrete shall be 3500 pound strength with 7% entrained air, four inches in thickness, reinforced with Number 4, four inch by six inch mesh. Cement concrete at driveway openings shall be six inches in thickness. Cement concrete shall be steel troweled and receive a fine broom finish. An expansion joint (3/4 inch open) shall be provided at least every 20 feet; dividing joints shall be scored into walk every four feet. Base gravel material shall be in accordance with the specifications outlined above for street construction, provided that no stone shall have a dimension in excess of two and one half (2-1/2) inches. It shall be compacted to 95%.

### **8.2.2. Bituminous Concrete**

The foundation shall be eight (8) inches of bank run gravel as specified in 8.2.1 above. The wearing surface shall be laid in two courses, a one and one half (1-1/2) inch binder course and a one and one half (1-1/2) inch finish course thickness measured after compaction. The material and application shall conform to the Specifications outlined for roadway surfacing. All edges of the walks shall be formed with wood screeds.

## **8.3. Curbing:**

All curbing shall be vertical granite type VA-4 as specified in the most recent Massachusetts Department of Public Works, "Standard Specifications for Highways and Bridges" and shall be installed along the back gutter lines on both sides of the street in accordance with the following specifications:

### **8.3.1. Granite Curb Type VA-4**

- a. This type of curbstone shall have a top surface free from wind, shall be peen hammered or sawed to an approximately true plane, and shall have no projections or depressions greater than 1/8 inch. The front and back arris lines shall be pitched straight and true and there shall be no projection on the back surface for 3 inches down from the top which

would exceed a batter of 4 inches in 1 foot.

- b. The stones for type VA4 granite curb shall be cut to the following dimensions:

Minimum Length	6 feet
Width at Top	6 inches
Depth	17-19 inches
Minimum Width at Bottom	4 inches (for not more than 2/3 length)

**8.3.2. Granite Curb Inlets**

- a. The granite for curb inlets shall have a horizontal bed and the top shall be free from wind. The stone shall be sawn or peen hammered on top and the front and back edges shall be pitched true to line.
- b. The granite curb inlet shall be 6 feet in length, plus or minus 1/2 inch, from 17-19 inches in depth, 6 inches wide at the top and at least 6 inches wide at the bottom.
- c. Curb inlets to be set on a radius of 160 feet or less shall be cut to the curve required, unless otherwise directed by the Town Engineer. The joints of all curved curb inlets shall be cut on radial lines.
- d. A gutter mouth at least 3 inches in depth and at least 2 feet in length shall be cut in the front face of the stone as shown on the plans.
- e. Granite curb inlets shall match the adjacent curbing in color.

**8.3.3. Granite Curb Corners Type A**

The granite for curb corners shall have horizontal beds and shall match the adjacent curbing in size, color and quality. The front arris lines shall extend through 1/4 of a circle having a radius of 2 feet. The back arris line shall be straight. The plane of back shall be normal to top.

**8.3.4. Transition Curb for Wheelchair Ramps**

Transitions from normal curb settings to wheelchair ramps shall be accomplished with transition curb as directed. Transitions shall be of the same type curb and similar to that abutting and, if on a curve, of the same radius.

**8.4. Tree Lawns and Cleared Areas:**

All cleared areas including tree lawns and other areas within the street right-of-way shall be treated in the following manner:

- a.. On tree lawns, at least four (4) inches of topsoil (depth after compaction) shall be applied. Seeding of lawn grass shall be done after building construction has been completed on the adjacent lots.
- b. No removal of loam from the development shall be made until an eight (8) inch thickness of compacted loam shall be provided throughout the entire area of all lots and on the tree lawns along the roadway. Only such areas as roadways, driveways, building sites and areas requiring filling may be stripped of topsoil. Only surplus loam after the above requirements have been met may be disposed of elsewhere.

**8.5. Utility Installation:**

**8.5.1. Drainage**

**8.5.1.1. Pipes and Culverts**

- a. Pipe for the construction of culverts and drains shall be reinforced concrete except where such culverts or drains pass under a roadway or driveway in which case they shall be reinforced concrete and extra strength.
- b. Pipe joints shall be carefully made up so that the spigot is tightly butted to the seat of bell and the spacing between the spigot uniformly proportioned and caulked with loose or braided jute. The joints shall be filled with cement in all cases.
- c. All utility trenches shall be filled with bank gravel carefully compacted, and leveled with adjacent grades. When not in roadway or shoulder, four (4) inches of loam shall be placed over trench fill, grades being leveled with adjacent terrain. All drains shall be laid to uniform grades and carefully backfilled so that pipe is supported throughout its entire length with compacted earth.

#### **8.5.1.2. Catch Basins and Manholes**

Catch basins shall have a four (4) foot precast sump. All catch basins and manholes shall be precast concrete. Catch basin rims will be set at leveling course grade. The materials and construction of catch basins shall conform to the most recent MDPW "Standard Specification for Highways and Bridges." Special construction modifications requiring changes from the above will be approved only by the Director of Public Works on an individual basis. The standard frame and grate shall be of the Cascade Type when the roadway slope is greater than six (6) percent and the Town of Reading Standard for lesser slopes.

#### **8.5.2. Water**

All water main and service connection construction shall be performed by, or under the direct supervision of the Town of Reading Water Distribution Division of the Department of Public Works. All construction methods shall conform to the specifications of said Division.

#### **8.5.3. Sewer**

##### **8.5.3.1. Sewer Pipe**

All sewer pipe shall be SDR 35 PVC pipe with a minimum diameter of eight (8) inches. Where cover is less than four (4) feet Schedule 40 PVC shall be used. Sewer pipe shall be placed on a six inch bed of three quarter (3/4) inch crushed, washed stone except in areas of ledge where one (1) foot of crushed stone shall be used. The trench shall be backfilled with three quarter (3/4) inch crushed stone for three quarters (3/4) of the depth of pipe and then with bank run gravel for the remainder of the trench. No stone larger than two (2) inches shall be placed in the trench for a depth of one (1) foot over the crown of the pipe.

##### **8.5.3.2. Sewer Manholes**

Sewer manholes shall be precast concrete with rubber boots cast into the manhole. Manholes shall be placed on a bed of three quarter (3/4) inch crushed, washed stone, one (1) foot in depth.

#### **8.6. Cleaning Up:**

Upon completion of all work on the ground, the subdivider shall remove from the streets and adjoining property, all temporary structures and all surplus material and rubbish which may have accumulated during construction and shall leave the work in a neat and orderly condition.

#### **8.7. Maintenance:**

If released from restrictions with regard to sale of lots or building on lots by the posting of a

Performance Bond, the subdivider shall maintain the roads for vehicular travel in a manner satisfactory to the Commission.

Further, the subdivider shall maintain the completed roads in a subdivision in a condition which meets all the above requirements to the satisfaction of the Commission until a Certificate of Completion (Form O) is issued for the subdivision. The Town will not plow the paved sections of the roadways unless the castings are patched, the street is paved, and there are residents living in the homes and the Town has a waiver of claims from plow damage. Otherwise, the subdivider will be required to plow the area.

**8.8. Earth Removal and Filling:**

- a. No earth which is contaminated by any hazardous or toxic material as defined in Federal or State laws and regulations or which has any reportable concentration of any such material as defined pursuant to said laws and regulations shall be removed or excavated from any lot or parcel of land except in accordance with applicable State and Federal laws and regulations. No earth which is so contaminated or which contains trash, refuse, rubbish, or debris, stumps, branches, or other solid organic material, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles or parts of any of the foregoing shall be deposited onto or used as fill on any lot or parcel of land in this or any other subdivision in the Town of Reading.
  
- b. Earth removal or filling activity shall take place in any subdivision only if such activity:
  - 1. Does not endanger the public health or safety or constitute a nuisance;
  - 2. Does not produce noise, dust or other effects observable at the lot lines in amounts seriously objectionable or detrimental to the normal use of adjacent property;
  - 3. Does not result in the transportation of materials in such a manner as to cause traffic congestion or hazards, particularly on residential streets, or result in the deposit or spillage of earth onto a street or way;
  - 4. Does not result in damage to streets or ways;
  - 5. Results in a condition that final grading, topography, and drainage characteristics in place following construction are strictly as shown on the plans approved or as duly amended in connection with subdivision approval, including the installation of at least four inches of surface topsoil or loam. No earth shall be removed from a site in such quantities that would prevent this condition from being met.

**8.9. Other Requirements:**

**8.9.1. Hours of Construction Operations:**

- a. Construction activity shall not take place in any subdivision or in any building contained therein except during the following hours:
  - Mondays through Fridays inclusive: 7:00 AM to 6:00 PM,
  - Saturdays: 9:00 AM to 5:00 PM,
  - Sundays and Legal Holidays: none;

**8.9.2. Underground Storage Tanks:**

No subdivision shall contain at any time any underground tank or receptacle for the storage of

fuel or any other toxic, hazardous, or harmful material.

**8.9.3. Impervious Surface Area:**

Prior to the issuance of any building permit for any lot within a subdivision located in the Aquifer Protection Zoning Overlay District, the Developer shall supply or cause to be supplied to the satisfaction of the Town Planner a copy of the deed recorded or to be recorded for said lot stating the maximum impervious area allowed for said lot consistent with such impervious area indicated on the approved Definitive Subdivision Plans as set forth in Section 6.1.1.b.19. hereof.

## **9.0. CONTRACTS, SURETY, ENFORCEMENT, AND INSPECTIONS**

### **9.1. Endorsement of A Plan:**

CPDC shall not endorse an approved Definitive Subdivision Plan until the required twenty-day appeal period has expired and until an acceptable method to secure the construction of ways and the installation of utilities in strict compliance with all terms and conditions of the approval of such plan, and any revisions have been satisfactorily included in such plans as stipulated in said conditions of approval, has been presented to and approved by CPDC and executed by the applicant.

Two complete sets of mylar originals of all plan sheets shall be submitted for endorsement. One signed set shall be delivered to and retained by the Engineering Division of the Department of Public Works for record purposes. In addition, an electronic copy of the subdivision plan as approved shall be submitted to the Engineering Division in a format acceptable to the Town Engineer.

#### **9.1.1. Ownership of Subject Property:**

Before requesting that the CPDC endorse a Definitive Subdivision Plan, the applicant shall have become the owner of record of the subject land to be subdivided, and the applicant shall provide to CPDC acceptable documentation of such status.

#### **9.1.2. Endorsement Upon No Appeal:**

If no written notice of any appeal is received by the Reading Town Clerk within twenty days of the filing of the CPDC's approval of a Definitive Subdivision Plan, the Town Clerk upon request of the applicant shall certify that said twenty-day period has expired with no notice of appeal having been filed.

Only after the Town Clerk has so certified, the applicant has revised the Definitive Plan to include references to CPDC's conditions of approval of said plan, if any, and the applicant has satisfactorily fulfilled all conditions specified to have been fulfilled prior to endorsement, the CPDC upon request of the applicant shall at a regularly scheduled meeting endorse said plan by affixing onto the top sheet of the plan the signatures of a majority of the Commission's members and by affixing the Chairman's signature onto each subsequent sheet of the plan.

#### **9.1.3. Endorsement Upon Appeal:**

If written notice of an appeal is received by the Reading Town Clerk within twenty days of the filing of the CPDC's approval of a Definitive Subdivision Plan, CPDC shall upon request of the applicant endorse the plan, in the manner described in Section 9.1.2. above, only after entry of a final, unappealable decree of the Court sustaining the approval of such plan.

#### **9.1.4. Endorsement of a Plan Approved by Default:**

If a Definitive Subdivision Plan is approved by the failure of CPDC to act within the required time, then after the twenty day appeal period from the required time has expired without written notice of an appeal being taken; or if an appeal has been taken, after entry of a final unappealable decree of the Court indicating the approval has become final the Town Clerk upon request of the applicant shall issue a certification stating the date of submission of the plan for approval and any extensions to the time period allowed for filing a decision relative to that plan, and stating

that the CPDC failed to file notice of final action with respect to that plan with the Town Clerk within the required time period, and that the approval of that plan by failure of CPDC to act has occurred.

**9.2. Performance Guarantee:**

**9.2.1. Performance Guarantee Required:**

Before CPDC shall endorse an approved Definitive Subdivision Plan, the applicant shall file with CPDC acceptable fully executed performance guarantee documents.

**9.2.2. Methods of Performance Guarantee:**

As set forth in MGL Chapter 41, Section 81U, any of the following methods of performance guarantee, singly or in combination, may be selected and from time to time varied by the applicant:

a. **Covenant:**

The applicant shall submit a Covenant Agreement (Form H), fully completed, properly executed, and duly recorded, and running with the land, providing that the ways and services shall be constructed in accordance with the approved Definitive Subdivision Plan and approval conditions thereof to serve any lot before such lot may be built upon or conveyed other than by mortgage deed. No partial release of lots from this Covenant shall be allowed. This covenant shall be referred to on the Definitive Subdivision Plan as follows:

"A Covenant Agreement between the Community Planning and Development Commission of the Town of Reading and \_\_\_\_\_(applicant) to secure the completion of required ways and utilities has been executed and is recorded at the Middlesex South Registry of Deed with this plan."

b. **Sureties:**

A surety in the form of a bond or deposit of money or negotiable securities sufficient in the opinion of the CPDC to secure the construction of ways and the installation of municipal services may be provided, acceptable to CPDC at any time prior to the completion of the subdivision. The CPDC will only accept bonds which are issued by sureties listed on the latest version of the United States Department of the Treasury Circular 570, Companies Holding Certificate of Authority as Acceptable Sureties on Federal Bonds and Acceptable Reinsuring Companies. The value of the surety shall be based on the total estimated costs, including engineering, management, supervisory, inspections, inflation, and contingencies, and the costs to prepare as-built plans, to complete all remaining required improvements in the subdivision over a period of time extending to four years from the date of the establishment of the surety, together with the costs of any restoration of affected lands and properties:

1. **Deposit:**

The applicant shall submit a Performance Bond--Secured by Deposit (Form I), fully completed and duly executed, accompanied by a deposit of money, sufficient in the opinion of CPDC, to secure performance of the construction of ways and the installation of municipal services required for lots shown on the plan. The applicant shall specify the time within which such construction shall be completed. No interest on such funds shall be payable by the Town to the

applicant, and if on the advice of the Town Treasurer, CPDC determines that the value of money or securities so provided declines or may decline below the amount necessary to secure such construction, CPDC shall require the applicant to augment the value of such accordingly.

2. **Surety Company:**

The applicant shall submit a Performance Bond--Secured by Surety Company (Form J), fully completed and duly executed, accompanied by a proper bond guaranteed by a surety company properly licensed to do business in the Commonwealth of Massachusetts, sufficient in the opinion of CPDC, to secure performance of the construction of ways and the installation of municipal services required for lots shown on the plan. The applicant shall specify the time within which such construction shall be completed.

3. **Retention of Funds by Lender:**

The applicant shall submit a fully completed and properly executed Three-Party Agreement (Form K), constituting an agreement executed after the recording of a first mortgage covering the entire premises shown on the approved Definitive Subdivision Plan given as security for advances to be made to the applicant by the lender, which agreement shall be executed by the applicant, the lender, and the CPDC, and shall provide for the retention by the lender of funds sufficient in the opinion of CPDC and otherwise due the applicant, to secure the construction of ways and the installation of municipal services. Said agreement shall provide that in the event the work is not completed satisfactorily to CPDC within the time set forth in the agreement, any funds remaining undisbursed shall be available to CPDC for causing completion of all such work.

**9.3. Recording of the Plan and Covenant:**

After the endorsement of the Definitive Subdivision Plan as specified in Section 9.1. hereof, the applicant shall cause the plan, together with approval conditions, covenant, and any easements, rights-of-way, and surety documents, to be recorded with the Middlesex South Registry of Deeds or Registry District of the Land Court. Thereupon the applicant shall supply to CPDC a mylar copy of the recorded plan and seven blackline or blue-line copies thereof, and three duplicate certified copies of all other documents so recorded. CPDC shall file the mylar and one copy of the plan and one duplicate certified copy of such documents with the Engineering Division of the Department of Public Works, one copy of the plan and one duplicate certified copy of such documents with the Town Clerk, and shall retain one copy of the plan and one duplicate copy of such documents in its own records, and shall distribute one copy of the plan to each of the Building Inspector, the Board of Assessors, the Board of Health, and the Conservation Commission.

In the case of a subdivision secured by a surety, and only after receipt of evidence of the proper recording of all appropriate documents referenced above, the Town Planner shall notify the Building Inspector by Form L (Notice to the Building Inspector) that Building Permits may be issued for lots in the subdivision.

**9.4. Completion of Construction:**

**9.4.1. Time Limit for Completion:**

Construction of all required improvements shall be completed fully and to the satisfaction of CPDC in accordance with the approved Definitive Subdivision Plan, conditions of approval, and any modifications thereto duly authorized, within two years of the date of endorsement of the plan or the time set forth in any surety, whichever is earlier.

**9.4.2. Extension of Time for Completion:**

An applicant may request an extension of the above two-year period by submitting in writing to CPDC before the expiration of said two-year period such a request, provided that no such request shall be for an extension of more than one year and that the request includes the reasons for the request, and an acceptable schedule for completion of each of the remaining work activities. CPDC may, by majority vote of its membership, grant such request or grant a modification thereof. More than one extension may be granted. As a condition of permitting any such extension, CPDC shall have the right to revise the amount of any surety to ensure that sufficient funds are retained to secure the completion of required improvements and shall have the right to revise the Covenant Agreement accordingly.

**9.5. Reduction or Release of Performance Guarantee:**

**9.5.1. Reduction of Performance Guarantee:**

The penal sum of any surety may on request of the applicant be reduced to reflect the actual expected cost of work remaining to be completed.. The applicant shall make a request for such reduction on a fully completed and properly executed Request for Reduction or Release of Surety Amount form (Form M), together with two copies of a certificate by a Registered Professional Engineer which shall describe the work which has been completed since the establishment of the surety, an itemization of the work subject to any previous surety reductions, and a statement that the work has fully complied with the approved Definitive Subdivision Plans. After obtaining a report from the Town Engineer and/or the Town Planner as to whether all such work has in fact been satisfactorily completed, the CPDC shall approve such surety reduction as it deems appropriate.

**9.5.2. Release From Covenant:**

**9.5.2.1. Requirements for Final Release and Durability of Required Improvements:**

In addition to the requirements of MGL Chapter 41, Section 81U, no subdivision shall be accepted and no final release of a performance guarantee shall be given by CPDC until:

- a. The integrity of road pavement and drainage has been verified following a full winter in place. CPDC shall retain a surety in the sum of fifteen percent (15%) of the total cost of improvements which shall be released following the verification that the utilities have withstood the winter or have been repaired to CPDC's satisfaction upon advice of the Town Engineer.
- b. Any required planting areas have been installed for a sufficient time and are in a healthy condition so that the Commission, upon advice of the Tree Warden, may be satisfied that the vegetation has been established. The required time period shall be one (1) year from installation through to the following July 1st for shrubs and grassed areas and the period specified in Section 7.6.2.6. for trees. CPDC shall retain a surety in the amount of five percent (5%) of the total cost of improvements to ensure the establishment of the vegetation. Upon advice of the Tree Warden, CPDC shall require the proper installation

of replacement plantings in accordance with the above-referenced period of time for insurance of tree survival.

- c. All improvements proposed in the Definitive Subdivision Plan have been completed and have been verified as completed by the Subdivision Inspector or Town Engineer.

#### **9.5.2.2. Conveyance of Easements and Utilities:**

Before CPDC will release a surety bond or deposit or issue a Certificate of Compliance, the developer shall execute an instrument (Conveyance of Easements and Utilities, Form N) transferring to the Town valid, unencumbered title to all sanitary sewers, storm water drains, water mains and all appurtenances thereto constructed and installed in the subdivision. Such conveyance shall grant, without cost and free of all liens and encumbrances, to the Town perpetual rights and easements to construct, inspect, repair, renew, replace, operate and forever maintain these utilities and to do all acts incidental thereto, in, through and under the whole of all streets in the subdivision, or such other land within or without the subdivision under which such utilities lie, including all easements. These provisions shall not be so construed as to relieve the developer and his successors in title of responsibility to complete all construction, as required by developer's covenants and agreements with the Town, and to thereafter maintain all streets and utilities in a satisfactory condition until they are accepted by the Town.

Acceptance by CPDC of the improvements required for a Definitive Subdivision Plan does not constitute the laying out or acceptance of by the Town of any streets, bikeways, or footpaths within a subdivision. The subdivider shall retain title to the fee of each street, path, or easement in or appurtenant to the subdivision until conveyed to the Town and accordingly accepted, and shall maintain and repair the roads and drainage facilities in a manner satisfactory to CPDC during that period.

If the subdivider chooses not to offer the right-of-way and other access easements in fee to the Town, this shall be noted on the Definitive Subdivision Plan and the subdivider shall propose and implement mechanisms for perpetual maintenance of the same acceptable to the CPDC.

If the subdivider declared the intent to offer the right-of-way and other access easements to the Town, the subdivider shall submit all necessary documentation for street acceptance, including plans in a form acceptable to the Registry of Deeds, legal description, easements, and any grants of rights necessary. The subdivider shall maintain fee ownership of the road in question until the road is accepted as a public way. Proposed deed language that demonstrates compliance with this section shall be submitted to Town Counsel for review.

#### **9.5.2.3. As-Built Plan:**

Upon completion of construction, and before release of a performance guarantee, the subdivider shall have prepared and submitted "As Built Plans" at the same scale as the street plans, which shall indicate the actual location of all of the following:

- a. Boundaries of the right of way;
- b. Boundaries of roadway improvements;
- c. Building locations, driveway locations and other major site improvements;
- d. Permanent monuments;
- e. Location and inverts, with elevation, of the required utilities, hydrants and drainage;
- f. Location of any other underground utilities, such as electricity, telephone lines, and street

- lighting.
- g. Lot boundaries.

A Registered Land Surveyor or Registered Professional Engineer retained by the subdivider, shall certify the completion of the construction of the ways and services as shown in the As-Built Plans and certify the accuracy of the As-Built Plans themselves. The As-Built Plans must be to the satisfaction of CPDC in terms of their content and form. An electronic copy of the as-built plan shall be submitted to the Engineering Division in a format acceptable to the Town Engineer.

**9.5.2.4. Releases and Certification of Completion:**

When an applicant believes that the subdivision ways and installation of municipal services have been completed, the applicant shall in addition to the requirements of MGL Chapter 41, Section 81U:

- a. Make a written request (Form O) for a Certificate of Completion, including a release of surety (Form M) if applicable,
- b. Provide a mylar and three copies of a complete As-Built Plan as specified in Section 9.5.2.3. above,
- c. Provide two copies of a certificate by the same Registered Land Surveyor or Professional Engineer which shall describe such work which has been completed, with itemization of work subject to any previous surety reductions, and which shall make a finding as to whether such work has fully complied with the approved Definitive Subdivision Plans, conditions of approval of same, and the Covenant.
- d. Identify any exceptions from the approved Definitive Subdivision Plans and/or conditions of approval of such plans; such request for Certificate of Completion shall specify any minor exceptions only as approved by the Commission, together with any financial guarantee acceptable to the Commission concerning such exceptions; these exceptions shall not relate to such major improvements as streets, sidewalks, utilities, and drainage appurtenances.

The acceptance of any subdivision roadway as a public street shall not be placed on any Warrant of any Town Meeting, nor shall CPDC recommend such acceptance, unless the subdivision containing such street shall have first been issued said Certificate of Completion and according to Section 9.6 hereof.

In the event that a deviation from the above-referenced approvals is found, then prior to CPDC's entertaining any vote with respect to the requested reduction, such deviation shall be corrected to CPDC's satisfaction, or shall be subject, at the applicant's or CPDC's election, to the provisions of Section 6.2.5. hereof.

In the event that CPDC finds that required construction or installation, or the approved plan, or any condition of approval thereof, has not been fully or satisfactorily completed, then it shall specify such by registered mail to the applicant with a copy to the Town Clerk, as required by MGL Chapter 41, Section 81U.

**9.6. Acceptance of Ways in a Subdivision as Public Ways:**

Approval of a Definitive Subdivision Plan shall not of itself constitute the laying out or acceptance by the Town of any way shown on such Plan as a Town way, or the establishment as

a public improvement for which the Town is responsible for, or the acceptance of any park playground, reserved area or other work or improvement shown on the Plan.

The ways shown on such Definitive Subdivision Plan shall not become public ways unless and until laid out and accepted as Town ways in accordance with law, and such ways, if not laid out and accepted as Town ways, shall not be opened to public use unless such opening has been approved in the manner provided in MGL Chapter 41, Section 74.

For those streets proposed to be accepted as public ways, the developer shall submit a Street Acceptance Plan to the Engineering Division for review and approval. The street acceptance plan shall be mylar conforming the rules and regulations of the register of deeds. An electronic copy of the street acceptance plan shall be submitted to the Engineering Division in a format acceptable to the Town Engineer.

The Commission will ordinarily not report favorably upon the laying out of a Town way within a proposed subdivision, or approve the opening of a way therein for public use, except in accordance with the Street Acceptance Criteria stated below, and unless the owner of the subdivision has caused such way to be located and constructed in accordance with the provisions of these Rules and Regulations or, in the case of the laying out of a Town way, has agreed to pay the cost of laying out and constructing such way, through betterment assessments under MGL Chapter 80, or in some other equally effective manner.

**9.6.1. Street Acceptance Criteria:**

The following criteria are those on which the Commission will base its recommendations to Town Meeting concerning the acceptance of streets:

- a. If the proposed acceptance is not of a street developed through approval by CPDC under the Subdivision Regulations, the Planned Residential Development By-Laws, or the Planned Unit Development By-Laws, then the Commission will customarily have no recommendation; this would include:
  - 1. Existing private streets not developed under Subdivision Control Law, and
  - 2. Existing private subdivision streets approved by the Board of Survey (prior to July 1, 1986) under Subdivision Control Law,The recommendation of acceptance of such streets, and the decision as to whether or not to levy betterments for any needed improvements, appropriately reside with the Board of Selectmen as Road Commissioners, with the advice of Town Counsel, the Department of Public Works, the Conservation Commission, and other appropriate officials.
- b. If the proposed acceptance is of a street developed through approval by CPDC under the Subdivision Regulations, the Planned Residential Development By-Laws, or the Planned Unit Development By-Laws, then the CPDC will not recommend such acceptance until:
  - 1. All road and utility work has been given final inspection by the Town Engineer, found acceptable and so reported to CPDC,
  - 2. The Town Planner, with input from the Town Engineer, the Tree Warden, the Health Director, the Fire Chief, the Building Inspector, and the Conservation Administrator, has reported to CPDC that all approval conditions have been met and occupancy permitted,
  - 3. CPDC, in accordance with the Subdivision Regulations, or in accordance with the

- PRD or PUD By-Laws as appropriate, has formally voted either to issue a Certificate of Compliance or to recognize full completion of the development, respectively,
4. All bonds or other forms of surety under the discretion of CPDC have been released in full, except those pertinent to Section 9.5.2.4.d.; or if any part of the bond or other form of surety has been seized and appropriated, that all work done by the Town relative thereto has been completed and found acceptable by the Town Engineer,
  5. All required Lot Releases have been executed by CPDC and evidence of recording thereof has been provided to CPDC by the developer, and
  6. The Conservation Commission has advised CPDC that there remain no unacceptably outstanding or unsecured or unbonded Conservation-related issues relative to the street or its pertinent development.

## **9.7. Inspections and Testing:**

### **9.7.1. General:**

All work performed as a consequence of these Regulations shall be subject to the review of the Commission which shall approve and accept or disapprove and reject each phase or portion of such work and at completion shall recommend the acceptance of all work or disapproval of the work with reasons therefor. The Director of Public Works, or authorized agent ("the Director"), will act for the Commission in the inspection of the work to insure compliance with these Regulations and to report to the Commission his recommendations as to approval or disapproval of the work. The Director will make certain inspections as prescribed herein in order to check the adequacy of the work at various stages prior to such work being covered by subsequent work. However, the Commission, the Director, and such other persons as the Commission may designate shall have the right to inspect the work at any time. Therefore, the developer shall at any time provide safe and convenient access to all parts of the work for inspection by the Commission or its authorized agents.

All work which has been disapproved or is not acceptable to the Commission shall be removed and replaced or otherwise corrected to the point of complying with the requirements of the Commission for acceptance. Any work which has been covered by subsequent work prior to acceptance or is otherwise not available or obscured to the point of rendering inspection of the work difficult shall be considered to be not acceptable to the Commission. Such subsequent work shall be removed as directed by the Director to insure availability of the work to be inspected as required herein, and release of the performance guarantee of all work prescribed herein and on the Definitive Subdivision Plan and in the conditions of approval thereof, and as directed by the Commission shall be dependent thereon.

At points as further described hereinafter, the construction of the required improvements shall be inspected by the Director, and unless approval of the work completed, including approval of materials used, to each such point has been given in writing, no further work shall be commenced. Such inspections may include the taking of certain samples for laboratory analysis or testing in such cases, the developer shall insure that the Director is in no way hindered or obstructed in the course of obtaining such samples. Where such samples are removed from the completed work the developer shall replace and restore such work, to the satisfaction of the Director to its condition prior to the taking of the sample.

The Director may require certified copies of delivery receipts or bills of lading or other certification as to the description of materials used or incorporated in the work. The Director may also require a sample of any materials or supplies which may be incorporated in the work; such samples shall be furnished at the expense of the developer, and the developer shall be liable for all costs and fees incurred by the Commission as a result of transporting and testing such materials.

**9.7.2. Notification of the Director:**

The Director will act as the Commission's representative and perform the inspections as required herein and otherwise act as the Commission's agent to insure compliance with these Regulations. The developer shall keep the Director fully informed as to the status and progress of the work and shall notify the Director directly in writing at least forty-eight (48) hours in advance that the work has progressed to a stage that an inspection is required. If requested, the developer shall also submit samples for testing one (1) week in advance of the date the test results are needed

In the event the Director makes an inspection of the work at the time designated and finds that such work is not at the proper state of completion or that the work has been covered or otherwise obscured, the Director shall notify the developer and the Commission as to the additional steps the applicant shall take to complete the work to the point required or to the extent the work shall be uncovered or exposed to full view. The developer shall notify the Director again when the work is ready.

The developer shall be liable for all costs and fees incurred by the Commission as a result of requests by the developer for an inspection of the work which, in the opinion of the Commission, was not at an acceptable stage of completion for such inspection.

**9.7.3. Lines and Grades:**

The Director will advise the Commission at any time during the construction, if, in his opinion, he believes that the work has not been laid out to the lines and grades as shown on the Definitive Plan or in the conditions of approval thereof. Any costs which, in the opinion of the Commission, are the responsibility of the developer shall be in addition to the fees required elsewhere herein.

**9.7.4. Inspection of Required Improvements:**

The following inspections of the required improvements will be made by the Director. These inspections may be in addition to any other inspections the Commission may make or cause to be made.

- a. First Inspection: An inspection will be made of the work upon completion of all clearing, grubbing and excavation and all work incidental thereto as may be required or implied. No fill shall have been placed at the time of this inspection.
  
- b. Second Inspection: An inspection will be made of the completed drainage system (without backfill) as required or implied herein or on the Definitive Plan or in the conditions of approval thereof. At the same time, or such other time as the work may be available, an inspection will be made of the completed municipal services (without backfill) as required on the Definitive Plan or in the conditions of approval thereof. The

inspection of the required municipal services will be made by the agencies responsible for the particular service. Each agency so involved will notify the Director of the approval of such work. Backfill of any portion of the drainage system or municipal services shall not be made until after receipt of notification of approval or acceptance by the Director or agency responsible. The inspection of the construction of the ways shall include the inspection of the backfilling and compaction of all utility trenches as may be installed by utility companies, and such work shall be performed in the manner as required by these Regulations, the Definitive Subdivision Plan, and the conditions of approval thereof. It shall be the developer's responsibility to insure compliance with these requirements. If, in the opinion of the Commission, the backfilling and compaction of utility trenches and the patching of the pavement has not been performed properly, the Commission may not release the bond or covenant applicable until such work has been performed to the satisfaction of the Commission.

- c. Third Inspection: An inspection will be made of the compacted fill as may be required to bring the roadways to their proposed grades. The developer shall notify the Director as to his source of gravel for fill as soon as such information is known, so that samples may be taken and analyzed by the Director. The developer is hereby advised not to proceed with the filling operation until such time as the Director notifies the developer that gravel proposed for the fill is acceptable, if the developer proceeds with the fill prior to such notice he does so at his own risk. The developer shall not use a gravel source other than the one designated without prior notice to the Director.
- d. Fourth Inspection: An inspection will be made of the compacted roadway foundation. A gravel sample or samples may be taken at the option of the Director in the same manner as prescribed for the Third Inspection. The roadway foundation will be checked for proper grade and alignment.
- e. Fifth Inspection: An inspection will be made of the completed Class I Bituminous Concrete Pavement Type 1-1 for the roadway surface. Samples of mix may be taken by the Director for purposes of performing an extraction test in order to compare the sample with the job-mix formula previously submitted.
- f. Sixth Inspection: An inspection will be made of all work as required on sidewalks, curbing, grass plots, side slopes, monuments, bounds, and street signs.
- g. Seventh Inspection: A final inspection will be made of all subsequent work as required herein or on the Definitive Plan or in the conditions of approval thereof, to include the final clean-up.

#### **9.7.5. Director's Report:**

The Director will submit a completed written report to the Commission for the ways in a subdivision. Such report will be augmented by additional information as the Commission may require to describe any special problems or situations which may arise during the construction of the required improvements.

The Director will report to the Commission that the work has been performed in accordance with

these Regulations, the Definitive Plan, and conditions of approval thereof, or the Director will advise the Commission that the work is not acceptable with the reasons therefor. At any time during the progress of the work, the Director will advise the Commission immediately of any factors which may adversely affect the progress of the work.