# **Town of Kensington**



# Subdivision Regulations Adopted:

The following table lists the dates of amendments to the subdivision regulations as well as the corresponding sections

Amended	Sections:
Amended	Sections:

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#### **SECTION 3.1 AUTHORITY**

In pursuance of the authority vested in the Kensington Planning Board by the voters of the Town of Kensington and in accordance with the provisions of Chapter 674,675 and 676, N.H. Revised Statutes Annotated, the Kensington Planning Board adopts the following regulations governing the subdivision of land in the Town of Kensington, New Hampshire.

#### A. Effective Date

These regulations shall be immediately effective upon adoption by the Board. Adopted on December 21, 2022, by unanimous vote.

#### B. Amendments

These regulations may be expanded, amended or rescinded by the Planning Board, under the following procedures:

- 1. The Planning Board shall hold at least one Public Hearing on proposed amendments to these regulations;
- 2. Copies of the proposed amendment shall be posted at the Town Hall and one other public place, and a summary version shall be published as a legal notice on the front page of the town's website;
- 3. The Public Hearing shall be held not less than ten (10) days after posting and publishing, not including the posting/publishing and hearing dates, but including weekends and holidays;
- 4. The Board will provide, at the Public Hearing, a sufficient number of copies of the proposed amendments for the use of those attending the Hearing;
- 5. The Board may, during the Public Hearing and after it is closed, make nonsubstantiative changes of an editorial or textual nature only to the proposed amendments, but these may not be such that the intent is thereby altered;
- 6. At any time after the Public Hearing has been held and closed, the Board may act on the proposed amendments. Such action may take place only at a Regular Public Meeting of the Board;

7. Attested, signed and approved copies of the approved regulations with amendments shall be filed with the Selectmen, Town Clerk, and an attested copy transmitted to the Registry of Deeds, Rockingham County, and to the New Hampshire Office of Planning and Development.

# C. Separability

If any court of law holds any part or provision of these regulations or application thereof to be invalid, such judgment shall be confirmed to the part, provision or application directly involved in controversy and shall not affect nor impair the validity of the remainder of these regulations, or the application thereof, to other subdivision applications or circumstances.

#### **SECTION 3.2 DEFINITIONS**

**A. Subdivision**: the division of a lot, tract, or parcel of land into 2 or more lots, plats, sites, or other divisions of land for the purpose, whether immediate or future, of sale, rent, lease, condominium conveyance or building development. It includes resubdivision and, when appropriate to the context, relates to the process of subdividing or to the land or territory subdivided.

The division of a parcel of land held in common and subsequently divided into parts among the several owners shall be deemed a subdivision under this title. N.H. Rev. Stat. § 672:14

#### SECTION 3.3 PROCEDURES: SUBDIVISION APPROVAL

# A. Application For Subdivision Approval

Whenever any subdivision is proposed to be made, and before any contract for the sale of such subdivision or any lots or parts thereof shall have been negotiated, and before any application for a building permit for the erection of any structures thereon shall be made, the owner or his agent shall submit a completed application addressed to the Chairman of the Board.

#### B. Submission

The application shall be filed with the Board at least twenty-one (21) days prior to a regularly scheduled Board meeting. There shall not be any transfers of lots or a portion thereof prior to an approved subdivision plan being recorded at the Registry of Deeds.

Applications will be formally accepted only at such regularly scheduled meetings and shall include the following:

- An application form, available through the Planning Board section of the Town of Kensington website or at the Town Hall, and all information required by these regulations;
- Appropriate filing fees (see Town of Kensington website, Planning Board, "Planning Board application- Filing Procedures"). Note that any additional charges incurred because of technical review of documents or professional interpretation of data shall be paid by the applicant before signing of Final Plats; and
- 3. A subdivision plan shall be provided upon application that confirms with the following requirements:
  - i. Sheet size: eight (8) 22" x 34", and ten (10) 11" x 17" and one plan set in digital form.
  - ii. The scale for all plans must be not more than 100 feet to the inch. Match lines and joining sheets may be used if necessary for larger plans; all plan sheets must be at the same scale.
  - iii. Date, title, scale, north arrow, locus map
  - iv. Title block shall include owner of record, the name and address of developer (if applicable), and property address.
  - v. Name, license number and seal of the NH licensed land surveyor and all other professionals involved with the preparation of the plan shall be added to the plan sheets. Abutters shall also be added to the plan set.
  - vi. Topographical plan showing Existing and proposed contour lines at two (2) foot vertical intervals, with spot elevations where grade is less than five per cent (5%); permanent on-site benchmark with elevation from USGS datum. Topographical map indicating buildings, water courses, ponds streams or standing water, exposed rock ledges, trails and other significant natural and manmade features.
  - vii. Location of existing and proposed easements and deed restrictions, copies of which should be attached to the application.
  - viii. Location, names and widths of existing and proposed public and private streets within two hundred feet (200') of parcel.
  - ix. Endorsement block for final Planning Board approval is required for each plan.
  - x. List of all required Federal, State, and other approvals (with approval number and date) shall be noted on the plan.
  - xi. All relevant Zoning designation(s) shall be noted on the plan; any variances granted by the ZBA to the Zoning Ordinances shall be noted on the plan.
  - xii. Plans shall detail Flood Hazard Areas and Shoreland Protection Boundaries. For all subdivisions of fifty (50) lots or five (5) acres, the applicant must submit Base Flood Elevation Data to ensure compliance with the Flood Plain Development Ordinance.

- xiii. Location and exact dimensions of property lines; locations of monuments; area, in acres and square feet, of the entire parcel.
- xiv. Bearings, including points of curvature and tangency to the nearest minute.
- xv. The error of closure shall not be less than one in ten thousand.
- xvi. Existing and proposed impervious area, square feet and percentage.
- xvii. Required setbacks shown (building, septic, wetland, property line).
- xviii. Required buffer and screening areas shown including, but not limited to, wetland and aquifer protection district buffers.
- xix. Site specific soil map that includes the location of all jurisdictional wetlands and vernal pools, as delineated by a Certified Soil or Wetlands Scientist.
- xx. Type, extent and location of existing and proposed landscaping and open space areas indicating what existing landscaping and open space areas will be retained.
- xxi. Location of all parcels of land proposed to be dedicated to public use and the condition of such dedication, and a copy of such private deed restrictions as are intended to cover all or part of the tract; location of dedicated recreation areas.
- xxii. Existing fencing features and details.
- xxiii. Existing and proposed locations and layout of catch basins and other stormwater drainage features.
- xxiv. Size and proposed location of water supply and sewage facilities and provision for future expansion of sewage and water facilities; and all distances from existing water and sewage facilities on the site and on abutting properties to a distance of one hundred feet (100'). Location of two suitable test pits per proposed lot, and their accompanying test results, must be provided within a four thousand (4,000) sq. foot receiving area suitable for installation of a septic system. (does not apply to minor lot line adjustment)
- xxv. Existing and proposed locations and layout of all roadway including dimensions, when applicable.
- xxvi. Location, type, size and design of proposed signs; lighting features and details for all outdoor facilities and location of all utilities, features and details (above, at or below grade) if applicable.
- xxvii. The location, width, curbing and type of access ways, egress ways and driveway reserve areas plus streets within and around the proposed site; lines of all existing adjoining streets.
- xxviii. Proposed type of use for the parcel.
- xxix. Abutter's buildings, wastewater facilities, driveways and well within seventy-five feet (75') of the parcel; if there is nothing within seventy-five feet (75') a note with that statement must appear on the plan.
- xxx. All additional information required by other local, state and federal agencies; any other environmental or man-made features important to the site design process; any other exhibits or data that the Planning Board may require in order to adequately evaluate the proposal,

including, but not limited to: hydrogeologic assessment, traffic assessment, environmental impact assessment, economic impact assessment. The Planning Board may require additional color, shaded, and/or perspective view plans.

xxxi. Upon submission, proposed lots will be labeled using letters (ex.: A, B, C, etc.).

xxxii. Construction sequencing details.

xxxiii. Any waivers of subdivision regulations requested/granted.

## C. Notification- Parties of Interest

The Board shall, in accordance with the conditions of RSA 676:4,I (d):

- Notify the applicant and all abutters of record by certified mail not less than ten (10) days prior to the date of the scheduled hearing, that an application has been made to the Planning Board and a public hearing shall be held; and
- 2. Notify the general public of the same fact at the same time, by legal notice published in at least two public places in Kensington and on the front page of the Town's website.
- Should an application be continued following the first hearing, no notification shall be required to applicant or abutters of record if the purpose, date and place of the continued public hearing is made known at such meeting.

# D. Acceptance and Formal Consideration

The meeting date on which the Board votes to accept the formal application as complete shall become the Date of Acceptance in accordance with Chapter 676:4,I (c) of the State of New Hampshire's Revised Statutes Annotated (RSA).

The application must be reviewed for completeness with thirty (30) days of the date of submission which is the date applicant hands in their application to the Town.

If, at a Public Meeting for which parties of interest have been notified, the subdivision application is found to be complete, and it is determined that all other requirements of these regulations have been met the Board may discuss if any additional studies or reports are needed to render a decision. If such reports are necessary, an escrow account may be established to allow any third-party review of these reports.

The Board shall:

- 1. Vote on and subsequently note in its minutes whether the application for consideration by the Board has been deemed a complete application and the Board shall take jurisdiction of the application
- 2. Conduct a Public Hearing on the application in accordance with the procedures outlined in the Planning Board Rules of Procedure
- 3. In the event of continued public hearing, any revised submissions shall be submitted 10 days prior to the next scheduled public hearing. Any revised drawings submitted after the application date shall be clearly clouded with attached narrative of revisions. Revised Drawings submitted within less than 10 business days notice will not be considered at the Public Hearing

#### E. Board Action

Following Public Hearing on a subdivision application, the Board shall;

- 1. Act to approve or disapprove the application within sixty-five (65) days after the date on which the Board invoked jurisdiction unless an extension of time for action is granted in accordance with RSA 676:4, or requested by the applicant and such action shall be final;
- 2. Notify the applicant in writing of its action;
- 3. Place a copy of the preceding notice in the office of selectmen within 72 hours;
- 4. In cases of approval, confirm any condition thereto;
- 5. In cases of disapproval, state from the Board's Minutes the reasons therefore. Disapprovals of applications may be based upon:
  - **a.** Failure on the part of the applicant to provide information or data required by these regulations;
  - **b.** Failure on the part of the applicant to meet reasonable deadlines as established by the Board; or
  - **c.** Failure on the part of the applicant to pay all required fees and charges.
- 6. No action herein under may occur other than at a Public Meeting of the Board

Notification to the applicant with respect to any action shall be made in accordance with these regulations; and

In no case will any action under these regulations, intermediate or final, be taken with respect to an application until all requirements precedent thereto, including payment of all fees and applicable charges have been met. No subdivision plan will be approved unless all provisions of applicable land use regulations and zoning requirements are satisfied, waived or varied.

#### F. Failure to Act

In accordance with RSA 676:4, upon failure of the Planning Board to act on a subdivision application within sixty-five (65) days of its taking jurisdiction over the application, or longer if extensions of time are requested from and granted by the Selectmen, the applicant may obtain from the Selectmen an order directing the Board to act within fifteen (15) days of the date upon which failures occurred. Failure of the Planning Board to act upon such order of the Selectmen shall constitute grounds for the Superior Court, upon petition of the applicant, to issue an order approving the application if the court determines that the proposal complies with existing subdivision regulations and land use restrictions. If the court determines that failure to act within the specified time was the fault of the Planning Board and was not justified, the court may order the Board to pay the applicant's reasonable costs, including attorney fees, incurred in securing such order.

#### G. Waivers

When a subdivision applicant can demonstrate to the Board's satisfaction that strict adherence to these regulations is not practicable, in the Board's opinion a departure from these regulations may be made consistent with their intent, the Planning Board may authorize a waiver to these regulations. Because of peculiar conditions or circumstances relating to a particular subdivision application, the Board may require additional improvements or impose conditions on such a waiver. The basis for any waiver granted by the planning board shall be recorded in the minutes of the board.

The planning board may only grant a waiver if the board finds, by majority vote, that:

- 1. Strict conformity would pose an unnecessary hardship to the applicant and waiver would not be contrary to the spirit and intent of the regulations; or
- 2. Specific circumstances relative to the subdivision, or conditions of the land in such subdivision, indicate that the waiver will properly carry out the spirit and intent of the regulations.

#### H. Modified Procedures

The Planning Board may operate under Modified Procedures when reviewing for the following:

# 1. Lot Line Adjustment

An application for lot line adjustments, which does not create buildable lots, shall be subject to the following requirements and information required on the Town of Kensington Lot Line Adjustment Checklist:

- a. The applicant shall make application to the planning board shall submit all required materials per the applicable application checklist, as it may be amended.
- b. The Planning Board shall hold a public hearing and abutters shall be notified of this hearing.
- c. The applicant shall pay the required fee for a Lot Line Adjustment application.

# 2. Design Review

The Board may meet with an applicant for a Design Review per RSA 676:4.II(b) at any regular Public Meeting of the Board for the following purposes:

- a. Present and discuss more specific design, engineering and environmental details of the subdivision proposal;
- b. The Planning Board may request their engineer or other experts to be present for the discussion to provide advice and guidance on the materials presented; The cost for any town consultant will be the responsibility of the applicant in the Design Review process.
- c. Per RSA 676:4.I(d) all parties of interest shall be notified and a public hearing shall be held; and
- d. The Design Review Process is a preliminary review, not a formal application and any discussion regarding the design review is to be nonbinding on the applicant and the Board.

#### I. Final Plat

The Planning Board Chair or designee shall sign a recordable Final Plat upon fulfillment of any conditions of approval. The applicant shall record any required,

covenants, deed restrictions, etc., with the Register of Deeds, Rockingham County and provide the Town with proof of recording.

- 1. The Final Plat for recording shall be drawn on mylar in permanent ink, and shall include all data and exhibits in final form, as submitted and, if necessary, revised after Board decisions relating to the preliminary plans. The final plat shall be submitted as an original with two copies in blue or black line print. Sheet size shall be so as to conform to the requirements of the Registry of Deeds, Rockingham County. A one-inch margin shall surround all but the left side, which shall be two inches for binding. Space shall be allocated for necessary Planning Board endorsement, on the lower right hand corner of any and all sheets.
- 2. The Final Plat shall show sufficient data, acceptable to the Board's engineer, to determine readily the storm drainage network, and the location, bearing and length of every street line, lot line, boundary line, and to reproduce such line on the ground. All dimensions shall be shown to the hundredth of a foot and bearings to at least a half minute. The error of closure shall not exceed 1 in 10,000

## J. Construction Inspection Charges

Whenever a proposed subdivision involves street construction, the installation of structures for stormwater drainage, or other required construction improvements, the costs incurred by the Town in having required improvements inspected professionally shall be borne by the applicant. It shall be a condition of approval for applicant to submit a deposit in the amount of 2% of the estimated cost of said required improvements as determined to the satisfaction of the Town's engineer prior to the signing of the Final Plat. The amount deposited by this provision shall be used by the Town for the purpose of paying the Board's Engineer to make required or necessary inspections. Refunds of unused money will be made to the applicant, however, overdrafts must be paid prior to the issuance of a Certificate of Occupancy.

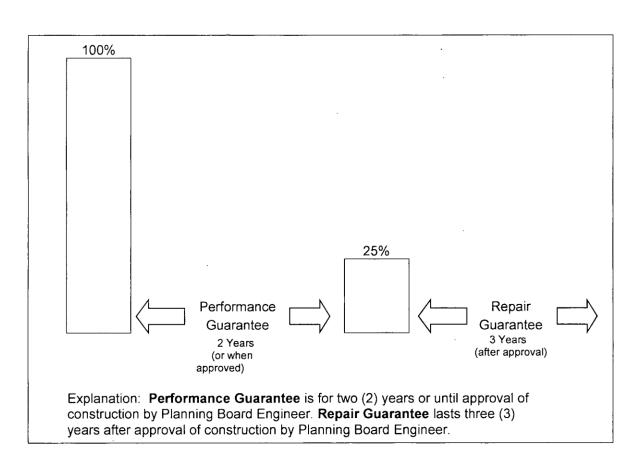
# K. Performance Guarantee Requirements

Prior to the Planning Board's signing of the Final Plat for an approved application, the applicant must submit a performance guarantee or surety, if required as a condition of approval, in the form of a self-calling letter of credit or cash surety, covering the costs of all required on-site and off-site improvements plus a tenpercent contingency, including erosion and sediment control measures during construction. Said surety must be reviewed and approved as to form and sureties by the Town Counsel, and plans will not be approved until such bond approval is received. The scope and amounts of said performance guarantee must be acceptable to the Planning Board.

- 1. Letter of credit and other forms of guarantee
  - a. The Planning Board may accept self-calling letters of credit or cash surety properly endorsed to the Town and retained by the Town. Said performance guarantee or surety shall be reviewed and approved by Town Counsel. Other forms of surety may be accepted by the Planning Board, at its discretion, provided Town Counsel determines that they are enforceable.
  - b. As allowed by RSA 674:36, III(c), the Planning Board may assess the costs of completing street and utility work in approved subdivisions against the lots (or land) within the subdivision which benefit from the improvements.
- 2. Two-year periods: Performance guarantee or other sureties shall be conditioned upon the completion of all required improvements within two years or as extended by Planning Board approval and reevaluation of the performance guarantee or surety under this section.
- 3. Maintenance during development: Said performance guarantee or surety shall guarantee that the applicant constructs per approved plans and maintains all streets and stormwater management, water and sewer facilities in the land development until such facilities are accepted by the Town. The construction cost estimate, plus a ten-percent contingency, shall be prepared by the applicant and reviewed for accuracy by the Town Engineer, and approved by the Planning Board.
- 4. Release of performance guarantee or surety.
  - a. Performance guarantees or other performance sureties shall be released by the Town upon approval of the Planning Board and replaced by a guarantee and maintenance surety at such time as the Town Engineer certifies that all required improvements have been satisfactorily completed in accordance with the approved plans, these regulations and any standards adopted herein by reference.
  - b. The guarantee and maintenance surety shall:
    - i. Be acceptable to the Planning Board.
    - ii. Be in an amount equal to 25% of the original guarantee.
    - iii. Be acceptable as to form and surety to Town Counsel.
    - iv. Guarantee the maintenance of all street, utility and drainage improvements until accepted by the Town, including snow plowing.

- v. Guarantee the repair of any street, utility or drainage improvement necessary within a period of three years following the release of the performance surety.
- c. Payment bonds or equivalent sureties shall be released after (or concurrently with) the release of the performance bond if the applicant has submitted sworn affidavits, as follows:
  - i. From the applicant stating that there are no outstanding payment obligations related to the land development and that no liens or security interests exist that would affect the Town or residents of the development.
  - ii. From all vendors, suppliers, subcontractors and creditors stating that they have been paid for all labor, material or services related to the land development.
  - iii. Said affidavits must be reviewed and approved by Town Counsel.

**Figure 1: Sketch of Guarantee Periods** 



# L. Long Range Plan

In the event that the proposed subdivision of a tract of land involves only a portion of the tract, a map showing the relation of the portion being subdivided to the whole tract shall be submitted. At the Board's request, this map shall also show a logical method of subdividing the remainder, even though subdivision be distant in time. Said map shall not be signed by any Board member, nor achieve any official status but shall remain in the application file.

#### SECTION 3.4 GENERAL REQUIREMENTS FOR LAND SUBDIVISIONS

An applicant for subdivision approval shall observe and adhere to the following general requirements and principles of land subdivision:

# A. Open Space and Scenic Areas

At the Planning Board's discretion, subdivision plans may be reviewed by the Kensington Conservation Commission and Recreation Commission to make recommendations as to whether:

- 1. Open space and scenic areas need be provided, based on the Master Plan or other published guidelines; and
- 2. Plans for new streets or modifications of existing streets allow for and show areas allocated for a park or parks suitably located and sized for neighborhood playgrounds or other recreational purposes.
- 3. Such land, if determined necessary, shall be deeded to the Town of Kensington and shall be made available for public use.

# B. Lot Shape Regulations

# 1. Intent and Purposes

The intent of this regulation is to embrace and ensure consistency with the Kensington Zoning Ordinance. The purposes of this regulation are as follows:

- a. To ensure that lots are shaped in a manner that promoted clarity of ownership, access across fee-title land rather than easement interests which may promote destructive property disputes, and to promote the convenient and harmonious development of the land;
- To prevent close proximity of narrow portions of lots that will create a situation that reduces privacy and increases congestion and overcrowding of the land;

- c. To prevent the close proximity of house sites, which tends to create conflicts among the use of the land, including maintenance disputes, use disputes and property ownership disputes between landowners; and
- d. To prevent lot shapes that cannot reasonably be interpreted to be an orderly layout of the land or ensure that proper description of ownership or ease of identification will carry forward in time.

# 2. Lot shape

- a. Lots shall be shaped in a manner that promotes clarity of ownership.
- b. To maximum extent possible all new lots shall be rectangular or square in shape;
- c. Side lot lines in general shall be perpendicular to the street;
- d. Lots shall have a minimum width of 100 feet as determined by any line drawn parallel to the two frontage corners. Corner lots may maintain the minimum 100 foot width based on either adjacent road.

#### C. Monuments

- a. All monuments adjacent to and in the subdivision shall be shown on the plan(s)
- b. Granite monuments at least four feet in length and four inches in diameter with suitable drill hole at the center point, shall be installed at the beginning and end of each curve at each street intersection on the right-of-way line, and at all front lot corners in the subdivision to establish the boundary lines of lots upon the ground with reasonable permanence. Iron pipes at least four feet in length shall be set at all other lot corners, at each end of all curves, at the point where a curve changes its radius, and at all angle points in any line. Each monument shall be set two to six inches above the finished grade of the surrounding property. Where appropriate, one inch deep drill holes may be set in an existing stone wall or in ledge, in lieu of a required monument.
- c. Where the distance between monuments is greater than four hundred (400) feet, iron pipes shall be set at intervals not to exceed two hundred (200) feet.
- d. To guarantee the installation of monuments required by the subdivision plan, the following requirements shall be met:
  - If the subdivision does not involve the construction of a roadway; all monumentation shall be in place prior to the signing of the subdivision plan by the Board Chairman;

- ii. If the subdivision involves the construction of a roadway, all monumentation shall be in place before fifty percent (50%) of the surety held for the road construction is released; and
- iii. Upon installation, a Certificate of Monumentation certifying that the monumentation has been accurately installed shall be filed with the Board. The form shall contain the signature and seal of the licensed land surveyor that certified the placement of the monumentation.

## D. Septic Reserve Areas

Every proposed lot in a new subdivision shall contain a 4,000 square foot area labeled on all plans as septic reserve area, and designated for use exclusively as a septic waste disposal area.

The following standards shall govern such areas:

- The bounds of the septic reserve area shall be located no closer than 75 feet from any drainage group 5 or 6 soil as identified by high intensity or town wide soil survey maps;
- 2. Septic reserve areas shall not be located on any land where naturally occurring seasonal water table levels are closer than 18" from the original ground surface;
- 3. Septic reserve area location shall be noted on plans submitted to any other town official. The Planning Board shall have the option to require that this septic reserve area shall be the only area on the lot to be utilized for septic system placement, based on wetland, slope or other restricting natural resource considerations. Such requirements, if necessary, shall be labeled on approved subdivision plans, and shall be binding on the lots in question; and
- 4. All test pits utilized to determine soil characteristics of the septic reserve area shall be performed by a Licensed Register Land Surveyor, a N.H. Licensed Septic Designer, or a N.H. Registered Professional Engineer, with the cooperation and concurrence of the Town of Kensington Test Pit Inspector.

In cases where conflicts of observation and test pit profile determination exist, a neutral third party opinion will be required. Such third-party evaluation shall be performed by a qualified soil scientist, and shall be the binding information utilized.

# E. Driveway Reserve Area

A subdivision plan will show a "driveway reserve area" for each proposed building lot. The driveway reserve area is a possible location for a driveway that meets the Town of Kensington Driveway Regulations. Shared driveways may be required in order to meet the regulations.

#### F. Scattered and Premature Subdivision

The Planning Board may decline to approve a subdivision which it finds to be "scattered and/or premature" and which would, if approved, involve danger or injury to health, safety, or prosperity by reason of the lack of water supply, drainage, sewage, transportation, schools or other public services and/or which would require excessive expenditure(s) of public funds for the supply of such services.

It is intended that this regulation shall promote balances, responsible and desirable growth and to control the timing of development by avoiding haphazard, scattered and uncoordinated development. The evaluation which follows recognizes that development may be deemed "scattered and/or premature" if it involves or could involve the lack of, or would require an excessive expenditure of public funds to provide services, or would result in a cumulative adverse impact upon Town facilities and/or the neighborhood environment with respect to any or all of the following:

- a. Distance to the nearest elementary school and effect on school bus transportation;
- b. Potential fire protection problems owing to location and/or other special conditions relating to the development;
- c. Potential police protection problems owing to location and/or other special conditions;
- d. Potential snow plowing and other road maintenance problems owing to location:
- e. Potential problems relating to collection of trash owing to location or other special conditions;
- f. Inadequacy of access streets or roads and/or sidewalks;
- g. Potential problems relating to on-site water supplies and/or sewage;
- h. Inadequacy of water supply for fire protection purposes;

- i. Potential drainage impact problems;
- j. Conditions otherwise requiring excessive expenditure of public funds; and
- k. Other potential problems within the meaning and purpose of this Section.

If it is determined by the Planning Board that the proposed subdivision is scattered or premature, the Planning Board may require the developer to make improvements or to address adverse impacts on facilities or services, as conditions of subdivision approval.

These may consist of but not be limited to the following:

- i. Improve any access streets, existing or to be constructed, to appropriate Town road standards:
- ii. Build or reconstruct sidewalks if these be deemed necessary to the public safety;
- iii. Construct static water supplies (fire ponds) with dry hydrants for fire protection purposes;
- iv. Provide such traffic control facilities as are deemed necessary for the public safety.

The Planning Board will consider all impacts of the proposed subdivision on facilities and services and, may if it deems necessary, apportion to the developer those costs which can be properly assessed against the development as are found to be required because of the development.

If it is determined by the Planning Board that the proposed subdivision, using the above criteria, is scattered and/or premature, and that the off-site improvements cannot be made to cure the adverse conditions, the Planning Board may decline to approve such subdivision until such time as these adverse conditions are determined by the Planning Board to be curable.

#### G. Streets

Approval of an application by the Board shall not constitute an acceptance by the Town of the dedication of any street, road or park, or other public open space. The applicant shall tender all offers of cession in a form certified as satisfactory to Planning Board Counsel of all land included in streets, roads, or parks not specifically reserved by the applicant. All requirements of Article III of this regulation shall be met prior to action on a final plat for subdivision approval.

#### 1. **Definitions –**

- a. Cul-de-sac- A Street, whether public or private, with a single common ingress and egress and with a turnaround at the end. The beginning of the cul-de-sac shall be defined and measured from the point of access to the first street with continuous travel in opposite directions to an existing road network. The length of the cul-de-sac shall be measured from this beginning point to the end of the cul-de-sac, including the full radial path of travel around the cul-de-sac turnaround.
- b. **Loop Road** A street which is intended to serve as direct or indirect access to residential lots, which begins and terminates in the same street or road, but not at the same location. Loop roads may not be proposed to accomplish what would not be permissible as a cul-de-sac.
- 2. The arrangement of streets within a subdivision shall provide for the continuation of principal streets in adjoining subdivisions or for their proper projection when adjoining property is not subdivided, and shall be of a width at least as great as that of such existing connecting streets.
- 3. A street or highway right-of-way shall be sixty six (66) feet in width, and may be required to be more if a greater street width is warranted in the opinion of the Board.
- 4. To encourage the development of interconnecting road networks that increase accessibility for emergency vehicles, residents, school buses and municipal vehicles, cul-de-sacs are strongly discouraged.

Where the construction of a cul-de-sac is absolutely necessary, a cul-de-sac shall be equipped with a turn-around roadway at the closed end with a minimum radius of 100 feet from the center to the outside edge of the right-of-way, and with a minimum radius of 80 feet from the center to the outside edge of pavement. A cul-de-sac with a radius greater than 100 feet is permissible; however, the center shall be established using the 100 foot dimension stated herein. Dead end or cul-de-sac streets shall have a curvilinear alignment.

Where deemed appropriate by the Board, the dedication of an easement of adequate width to accommodate future roads and/or utilities shall be provided from the cul-de-sac to the nearest road or property line. Slope easements, for fill areas may be required. For cul-de-sacs requiring fill, the slope beyond the required shoulder shall be graded to 5:1.

To improve the street network and promote connectivity, no cul-de-sac shall begin at any point off of another cul-de-sac, and no cul-de-sac shall begin off of a loop road. Cul-de-sacs longer than 1,000 feet are prohibited.

- 5. Reserve strips of land, which, in the opinion of the Board, show an intent on the part of an applicant to control access to land dedicated or to be dedicated to public use shall not be permitted.
- 6. Intersecting property lines at street intersections shall be joined by a curve of at least a twenty-five (25) foot radius and an edge of pavement radius of fifty (50) feet.
- 7. Grades of all streets shall conform in general to surrounding terrain, and shall, so far as practical, not exceed five (5) percent. The Board may receive advice and counsel from the Town's road agent, its fire chief and its engineer as to special conditions required due to maintenance, erosion, storm water and emergency vehicle access considerations prior to allowing grades in excess of five percent. No street shall have a grade of less than one percent.
- 8. Land to be subdivided must be of such character that its development will not create conditions which endanger public health.
- 9. Streets which join or are in alignment with streets of abutting or neighboring properties shall bear the same name. Names of new streets shall not duplicate the name of existing streets in Kensington and shall be subject to approval by the Planning Board.

# H. Street Layout and Construction Standards

All streets shall be graded and improved to conform to the following standards and specifications. After review by the Board's engineer, the streets shall be approved as to design and specifications by the Board, whereupon construction may begin.

- 1. Streets shall be related to the topography, with curvilinear alignment whenever practical.
- 2. Centerlines of streets shall coincide with the centerline of the right-of-way and shall be designed using the following minimum standards:

<u>Criteria</u>	<u>Standard</u>
Right of way width	66 feet
Pavement width	20 feet
Crushed gravel shoulder	4 feet
Minimum road grade	1%
Maximum road grade	5%
Maximum road grade within 100 feet of intersection	2%
Minimum centerline radius	300 feet

Minimum intersection angle 75% Depth of granular base -Bank run gravel 18 inches Crushed gravel 6 inches Depth of bituminous concrete -Binder course 2½ inches Surface course 1½ inches Slope of pavement (minimum) 3/8" per foot 5/8" per foot Slope of shoulder (minimum) Intersection sight distance 200 feet 275 feet Minimum stopping sight distance

- 3. All roadway intersections shall be designed to have the specified cornersight distance measured from a point forty (40) feet from the edge of the intersected street.
- 4. Intersecting roadway pavements shall have a paved transition area at all corners to accommodate turning movements.
- 5. All bridges shall be as wide as the required pavement width, and shall conform to standard specifications for road and bridge construction as defined by the New Hampshire Department of Public Works and Highways.
- 6. Staking shall be located as follows:
  - a. Before any clearing along the road right-of-way, the centerline of the new road shall be staked and side-staked at fifty (50) foot intervals. Side stakes shall be set to the exterior of the R.O.W. at right angles from the centerline, indicating stationing and distances to the centerline of the road;
  - b. Limits of clearing shall be marked by stakes or flagging; and
  - c. After clearing is done and before commencing excavation, elevation shall be taken on the tops of the side stakes. Cuts and fill shall be computed to finish grade of roadway and said cuts or fill shall be marked on side stakes.
  - 7. All topsoil, stumps, brush, roots, boulders and like materials shall be removed from the proposed subgrade area. All muck or peat soils shall be excavated to stabilize the foundation of the road and refilled solidly with subbase material. Fill for sub-base material shall be tested by an independent Geotechnical testing firm to certify compliance. Sub-base materials shall be installed and tested in 12" lifts during construction. Minimum testing

- frequency shall be 250' dependent on the Planning Board approved engineering firm recommendations.
- 8. Embankments shall be formed of suitable material placed in successive layers not exceeding twelve (12) inches in depth for the full width of the roadway cross-section and shall be compacted uniformly and sufficiently to prevent settlement. Stumps, trees, rubbish or other unsuitable material shall not be used as fill. Filled material shall be allowed to thoroughly settle before applying gravel subbase.
- 9. The base course shall not be laid until the subgrade has been inspected and approved by the Board's engineer. An independent Geotechnical testing firm shall perform compaction testing for each 6" lift of fill material at 250 foot intervals along a proposed road. The base course shall consist of eighteen (18) inches of bank run gravel laid in three six inch courses and a six (6) inch course of crushed gravel. Each layer shall be thoroughly compacted by a method acceptable to the Board's engineer. The completed base shall conform to the lines and grades submitted in profiles and cross section construction plans.
- 10.On-site sampling of base course materials shall be performed at the discretion of the town engineer. At a minimum, one sample each of bank run and processed gravel shall be collected at 250' intervals. More testing may be required if requested by the town engineer. The samples shall be collected and tested by an independent laboratory. The cost of the collection and testing shall be borne by the applicant. If the material does not meet the specifications referenced in the Construction Checklist notes of the Town's subdivision regulations, it shall be replaced.
- 11. Fill and base course materials shall obtain 95% density, and shall conform to Divisions 203.3.8.1, 203,3.8.2, 508.3.4.2, and 304 of the 1983 published "Standard Specifications for Bridges and Highways," New Hampshire Department of Public Works and Highways. An independent Geotechnical testing firm shall provide materials certification for all common borrow and granular base materials utilized in the construction process.
- 12. The roadway shall be paved with hot bituminous pavement in accordance with the following specifications.
  - a. 2 ½ inch depth (after compaction) binder course
  - b. 1 ½ inch depth (after compaction) surface course

Pavement shall conform to the standards contained in Division 400 of the "Standard Specifications for Road and Bridge Construction".

- 13. Untreated **shoulders** and slopes shall have a minimum of four (4) inches of topsoil cover which shall be seeded or treated as noted on approved construction plans. Seeding shall meet the guidelines of the Rockingham County Conservation District erosion and sediment control recommendations.
- 14. **Underdrains** shall be installed where the character and composition of the soil in the roadbed, upon the advice of the Rockingham County Conservation District, warrant such structures. Underdrains, when necessary, shall be comprised of perforated metal pipes which have a minimum six (6) inch diameter, and backfill materials as specified under "Construction Checklist Notes" herein. The trench shall be inspected and approved by the Board's Engineer prior to subgrade preparation.
  - 14. Topsoil moved during the course of construction shall be redistributed to provide at least four (4) inches of cover to all areas of the subdivision including and in particular those areas disturbed between the right-of-way limits and the shoulders of the roadway. These areas shall be finished by seeding and mulching or planting. No topsoil may be removed or sold from the site unless approved by the Board of Selectmen.
- 16. Inspection Standards
  - a. An engineering firm, approved by the Planning Board, shall review all plans for roadway construction and perform inspections thereon during construction to certify compliance with the requirements herein prior to any release of any performance bond.
  - b. Cost estimates for roadway material and construction shall be based on the latest available 'R. S. Means Cost Data' and bond estimates shall be determined by these estimates. When bonds require renewal, a re-assessment shall be conducted to account for inflation.
  - c. Inspections by the Board approved engineering firm shall be scheduled as follows:
    - i. After staking as specified;
    - ii. After clearing and grubbing as specified;
    - iii. During sub-base installation as specified;
    - iv. During base course installation as specified:
    - v. Prior to binder course installation as specified;
    - vi. Prior to wear course installation as specified;
    - vii. During shoulder, slope stabilization as specified; and
    - viii. Discretionary inspections shall be performed when deemed necessary and appropriate by the Planning Board approved engineer.

# 17. As Built Survey.

The subdivider shall create and maintain a set of as-built records certified as accurate by the Planning Board approved engineering firm during the progress of work. On completion of the work, one final set of plans, stamped by a professional engineer and attested to by the Planning Board approved engineering firm shall be submitted to the Planning Board.

#### 18. Schedule of Construction

- 1. The contractor shall provide a timeline schedule identifying the anticipated completion of events listed in Construction Checklist
- 2. The contractor shall provide a 48-hour notice to the engineer to facilitate inspections.

# 19. Written Reports

The Planning Board shall be provided with a written report, and supporting engineering firm approval, that all work has been completed in compliance with town-imposed requirements.

# 20. Signs

- A. A sign, approved by the Road Agent, shall be erected by the subdivider on a metal post bearing the road name.
- B. Stop sign, speed limit, and other appropriate signs shall be installed by the subdivider where appropriate, in the judgment of the Police Chief.
- C. No structure or signs other than listed in paragraph a and b shall be placed within the Town's right of way.

#### 21. General Information

Decisions and recommendations made by the Planning Board's approved engineering firm relative to any technical requirements and conditions shall be official and binding.

CLASS C LOCAL ROAD CHART (see following page)

# I. Post Construction Stormwater Management Standards

a. Purpose and Goals. The purpose of post construction stormwater management standards is to provide reasonable guidance for the regulation of stormwater runoff to protect local natural resources from degradation and prevent adverse impacts to adjacent and downstream land, property, facilities and infrastructure. These standards regulate discharges from stormwater and runoff from land development projects and other construction activities in order to control and minimize increases in stormwater runoff rates and volumes, soil erosion, stream channel erosion, and nonpoint source pollution associated with stormwater runoff.

The goal of these standards is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public in the Town of Kensington. This ordinance seeks to meet that goal through the following objectives:

- a. Minimize increases in stormwater runoff from any development in order to reduce flooding, siltation and streambank erosion and maintain the integrity of stream channels.
- b. Minimize increases in nonpoint source pollution caused by stormwater runoff from development which would otherwise degrade local water quality.
- c. Minimize the total volume of surface water runoff which flows from any specific site during and following development to not exceed the pre-development hydrologic condition to the maximum extent practicable.
- d. Reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety or cause excessive municipal expenditures.
- e. Protect the quality of the Town's groundwater resources, surface water bodies and wetlands.

# b. Applicability.

- a. A Stormwater Management Report and plans shall be submitted with the Subdivision Application if applicable, and shall be prepared and certified by a licensed NH Professional Engineer.
- b. The post-construction stormwater management standards apply to any development or Redevelopment project which disturbs more than 5,000 square feet or disturbs more than 2,500 square feet within 100 feet of a surface water body.
- c. For sites that disturb less than 5,000 square feet, the Planning Board may grant an exemption if the amount of the total site impervious

cover created does not exceed 1,000 square feet. When an exemption is granted by the Planning Board, the following standards will be applied to these projects as conditions of approval.

- i. All runoff from new impervious surfaces and structures shall be directed to a subsurface infiltration device or properly discharged to a naturally occurring or fully replanted and vegetated area with slopes of 15 percent or less and with adequate controls to prevent soil erosion and concentrated flow.
- ii. Impervious surfaces for parking areas and roads shall be minimized to the extent possible (including minimum parking requirements for proposed uses).
- iii. All runoff generated from new impervious surfaces shall be retained on the development site and property.
- iv. Determination of compliance with standards i.-iii. above will be made by the Planning Board on a case by case basis as site conditions and constraints will differ greatly between various development proposals.
- d. The following activities are considered exempt from preparing and submitting a stormwater management plan:
  - Agricultural and forestry practices located outside wetlands and surface water setbacks and/or buffers.
  - ii. Resurfacing and routine maintenance of roads and parking lots.
  - iii. Exterior and interior alterations and maintenance to existing buildings and structures.
- 3. <u>Stormwater Management for New Development</u>: All proposed stormwater management practices and treatment systems shall meet the following performance standards.
  - a. Stormwater and erosion and sediment control practices shall be located outside any specified buffer zones unless otherwise approved by the Planning Board. Alternatives to stream and wetland crossings that eliminate or minimize environmental impacts shall be considered whenever possible. Stream and wetland crossings shall comply with state recommended design standards to minimize impacts to flow and enhance animal passage (see the University of New Hampshire Stream Crossing Guidelines (May 2009, as amended) available from the UNH Environmental Research Group website

    at <a href="http://www.unh.edu/erg/stream\_restoration/nh\_stream\_crossing\_guidelines\_unh\_web\_rev\_2.pdf">http://www.unh.edu/erg/stream\_restoration/nh\_stream\_crossing\_guidelines\_unh\_web\_rev\_2.pdf</a>)
  - b. Low Impact Development (LID) site planning and design strategies must be used to the maximum extent practicable (MEP) in order to reduce stormwater runoff volume, protect water quality, and maintaining predevelopment site hydrology. An applicant must document in writing why LID strategies are not appropriate when not used to manage stormwater.

- c. All stormwater treatment areas shall be planted with native plantings appropriate for the site conditions: trees, grasses, shrubs and/or other native plants in sufficient numbers and density to prevent soil erosion and to achieve the water quality treatment requirements of this section.
- d. All stormwater installations and areas that receive rainfall runoff must be designed to drain within a maximum of 72 hours for vector control.
- Snow storage and salt storage areas shall be covered and e. loading/offloading areas shall be designed and maintained in accordance with NH DES published guidance such that no untreated discharge to receiving waters results. Runoff from snow and salt storage areas shall enter treatment areas as specified above before being discharged to receiving waters or allowed to infiltrate into the groundwater. See NHDES published guidance fact sheets on road salt and water quality, and snow disposal at http://des.nh.gov/organization/commissioner/pip/factsheets.
- f. Surface runoff shall be directed into recessed vegetated and landscaped areas designed for treatment and/or filtration to the maximum extent practicable to reduce the need for irrigation systems.
- g. All newly generated stormwater, whether from new development or expansion of existing development ("Redevelopment"), shall be treated on the development site. Runoff shall not be discharged from the development site to municipal drainage systems or privately owned drainage systems (whether enclosed or open drainage). Runoff shall not be discharged to surface water bodies or wetlands in excess of volumes discharged under existing conditions (developed condition or undeveloped condition). A development plan shall include provisions to retain stormwater on the site by using the natural flow patterns of the site.
- h. Runoff from impervious surfaces shall be treated to achieve 80% removal of Total Suspended Solids and at least 50% removal of both total nitrogen and total phosphorus using appropriate treatment measures, as specified in the NH Stormwater Manual. Volumes 1 and 2, December 2008 as amended (refer to Volume 2, page 6, Table 2.1 Summary of Design Criteria, Water Quality Volume for treatment criteria) or other equivalent means. Where practical, the use of natural, vegetated filtration and/or infiltration practices or subsurface gravel wetlands for water quality treatment is preferred given its relatively high nitrogen removal efficiency. Note: The Anti-Degradation provisions of the State Water Quality Standards require that runoff from new development shall not lower water quality or contribute to existing water body impairments.
- Measures shall be taken to control the post-development peak rate runoff so that it does not exceed pre-development runoff for the 2-

year, 10-year, 25-year, and 50-year 24-hour storm events. Similar measures shall be taken to control the post-development runoff volume to infiltrate the groundwater recharge volume GR<sub>V</sub> according to the following ratios of Hydrologic Soil Group (HSG) type versus infiltration rate multiplier: HSG-A: 1.0; HSG-B: 0.75; HSG-C: 0.4; HSG-D: 0.15. For sites where infiltration is limited or not practicable, the applicant must demonstrate that the project will not create or contribute to water quality impairment. Infiltration structures shall be in locations with the highest permeability on the site.

- j. The design of the stormwater drainage systems shall provide for the disposal of stormwater without flooding or functional impairment to streets, adjacent properties, downstream properties, soils, or vegetation.
- k. The design of the stormwater management systems shall take into account upstream and upgradient runoff that flows onto, over, or through the site to be developed or re-developed, and provide for this contribution of runoff.
- I. All temporary control measures shall be removed after final site stabilization. Trapped sediment and other disturbed soil areas resulting from the removal of temporary measures shall be permanently stabilized prior to removal of temporary control measures.
- n. Whenever practicable, native site vegetation shall be retained, protected, or supplemented. Any stripping of vegetation shall be done in a manner that minimizes soil erosion.

# 4. Redevelopment Criteria:

- a. In order to determine the stormwater requirements for Redevelopment projects, the percentage of the site covered by existing impervious areas must be calculated. Stormwater requirements for Redevelopment will vary based upon the amount of site surface area that is covered by existing impervious surfaces.
- b. For sites meeting the definition of a Redevelopment project and having less than 40% existing impervious surface coverage, the stormwater management requirements will be the same as other new development projects with the important distinction that the applicant can meet those requirements either on-site or at an approved off-site location. The applicant must satisfactorily demonstrate that impervious area reduction, LID strategies and practices have been implemented on-site to the maximum extent practicable.
- c. For sites meeting the definition of a Redevelopment project and having more than 40% existing impervious surface coverage,

stormwater shall be managed for water quality in accordance with one or more of the following techniques, listed in order of preference:

- i. Implement measures onsite that result in disconnection or treatment of at least 30% of the existing impervious cover as well as 50% of the additional proposed impervious surfaces and pavement areas through the application of filtration media; or
- ii. Implement other LID techniques onsite to the maximum extent practicable to provide treatment for at least 50% of the entire site area
- d. Low Impact Development (LID) site planning and design strategies must be used to the maximum extent practicable (MEP) in order to reduce stormwater runoff volume, protect water quality, and maintaining predevelopment site hydrology. An applicant must document in writing why LID strategies are not appropriate when not used to manage stormwater.
- 5. Submission Requirements for Stormwater Management Report and Plans.
  - a. Stormwater management plans shall include an Existing Conditions Plan showing all pre-development impervious surfaces, buildings and structures; surface water bodies and wetlands; drainage patterns, sub-catchment and watershed boundaries; building setbacks and buffers, and topographic contours with minimum 2-foot intervals.
  - b. Stormwater management plans shall include a Proposed Conditions Plan showing all post-development proposed impervious surfaces, buildings and structures; temporary and permanent stormwater management elements and best management practices; important hydrologic features created or preserved the site; drainage patterns, sub-catchment and watershed boundaries; building setbacks and buffers; and topographic contours with minimum 2-foot intervals. The plans shall provide calculations and identification of the total area of disturbance proposed on the site (and off site if applicable) and total area of new impervious surface created. A summary of the drainage analysis showing a comparison of the estimated peak flow and volumes for various design storms (see below Stormwater System Design Performance Standards) at each of the outlet locations shall be included with the report or plans.
  - c. The report or plans shall include a brief narrative description of the general approach and strategies implemented, and the facts relied upon, to meet the goals of this section.

- 6. General Performance Criteria for Stormwater Management Plans.
  - a. All applications shall apply site design practices to reduce the generation of stormwater in the post-developed condition, reduce overall impervious surface coverage, and disconnect stormwater from the stormwater management system.
  - b. Water Quality Protection.
    - All stormwater runoff generated from new development or Redevelopment shall not be discharged directly into a jurisdictional wetland or surface water body without adequate treatment.
    - ii. All developments shall provide adequate management of stormwater runoff and prevent discharge of stormwater runoff from creating or contributing to water quality impairment. Where applicable, a stormwater management plan must comply with the EPA Phase II Stormwater Rules (as amended).
  - c. Onsite groundwater recharge rates shall be maintained, by promoting infiltration through the use of structural and non-structural methods. The annual recharge from the post development site shall maintain or exceed the annual recharge from pre-development site conditions. All stormwater management practices shall be designed to convey stormwater to allow for maximum groundwater recharge. This shall include, but not be limited to:
    - i. Maximizing flow paths from collection points to outflow points.
    - ii. Use of multiple best management practices.
    - iii. Retention of and discharge to fully vegetated areas.
    - iv. Maximizing use of infiltration practices.
  - d. Stormwater System Design Performance Standards.
    - i. Stormwater system design, performance standards and protection criteria shall be provided as prescribed in Table 1 below. Calculations shall include sizing of all structures and best management practices, including sizing of emergency overflow structures based on assessment of the 100-year 24-hour frequency storm discharge rate.
    - ii. The sizing and design of stormwater management practices shall utilize new precipitation data from the Northeast Region Climate Center (NRCC) or the most recent precipitation atlas published by the National Oceanic and Atmospheric Administration (NOAA) for the sizing and design of all stormwater management practices. See the NRCC website at <a href="http://precip.eas.cornell.edu/">http://precip.eas.cornell.edu/</a>.
    - iii. All stormwater management practices involving bioretention and vegetative cover as a key functional component must have a

landscaping plan detailing both the vegetation to be in the practice and how and who will manage and maintain this vegetation. The use of native plantings appropriate for site conditions is strongly encouraged for these types of stormwater treatment areas. The landscaping plan must be prepared by a registered landscape architect, soil conservation district office, or other qualified professional.

Table 1. Summary of Stormwater Infrastructure Design Criteria

Design	Description
Criteria	
Water Quality Volume (WQV)	WQV = (P)(Rv)(A) P = 1 inch of rainfall Rv = unitless runoff coefficient, Rv = 0.05 + 0.9(I) I = percent impervious cover draining to the structure converted to decimal form A = total site area draining to the structure
Water Quality Flow (WQF)	WQF = (q <sub>u</sub> )(WQV)  WQV = water quality volume calculated as noted above q <sub>u</sub> = unit peak discharge from TR-55 exhibits 4-II and 4-III  Variables needed for exhibits 4-II and 4-III: Ia = the initial abstraction = 0.2S S = potential maximum retention in inches = (1000/CN) - 10 CN = water quality depth curve number = 1000/(10+5P+10Q-10[Q <sup>2</sup> +1.25(Q)(P)] <sup>0.5</sup> ) P = 1 inch of rainfall Q = the water quality depth in inches = WQV/A A = total area draining to the design structure
Groundwater Recharge Volume (GRV)	$ \begin{array}{llllllllllllllllllllllllllllllllllll$
Channel Protection Volume (CPV)	If the 2-year, 24-hour post-development storm volume <u>does not increase</u> due to development then: control the 2-year, 24-hour post-development peak flow rate to the 2-year, 24-hour predevelopment level.

	If the 2-year, 24-hour post-development storm volume <u>does increase</u> due to development then: control the 2-year, 24-hour post-development peak flow rate to ½ of the 2-year, 24-hour predevelopment level or to the 1-year, 24-hour pre-development level.
Peak Control	Post-development peak discharge rates shall not exceed pre- development peak discharge rates for the 10-year and 50-year, 24- hour storms
Volume Control	Post-development total discharge volume from a site shall not exceed pre-development total discharge volume from a site for the 2-year, 10-year, 25-year and 50-year, 24-hour storms
EIC and UDC	%EIC = area of effective impervious cover/total drainage areas within a project area x 100 %UDC = area of undisturbed cover/total drainage area within a project area x 100

[After: NH DES Stormwater Manual: Volume2 Post-Construction Best Management Practices Selection & Design (December 2008, as amended)])

- 7. Spill Prevention, Control and Countermeasure (SPCC) Plan.
  Any existing or otherwise permitted use or activity having regulated substances in amounts greater than five gallons, shall submit to the local official such as Fire Chief, Emergency Response Official a SPCC plan for review and approval. The Plan will include the following elements:
  - a. Disclosure statements describing the types, quantities, and storage locations of all regulated substances that will be part of the proposed use or activity.
  - b. Owner and spill response manager's contact information.
  - c. Location of all surface waters and drainage patterns.
  - d. A narrative describing the spill prevention practices to be employed when normally using regulated substances.
  - e. Containment controls, both structural and non-structural.
  - f. Spill reporting procedures, including a list of municipal personnel or agencies that will be contacted to assist in containing the spill, and the amount of a spill requiring outside assistance and response.
  - g. Name of a contractor available to assist in spill response, contaminant, and cleanup.
  - h. The list of available clean-up equipment with instructions available for use on-site and the names of employees with adequate training to implement containment and clean up response.
- 8. The applicant shall provide that all stormwater management and treatment practices have an enforceable operations and maintenance plan and

agreement to ensure the system functions as designed. This agreement will include any and all maintenance easements required to access and inspect the stormwater treatment practices, and to perform routine maintenance as necessary to ensure proper functioning of the stormwater system. The operations and maintenance plan shall specify the parties responsible for the proper maintenance of all stormwater treatment practices. The operations and maintenance shall be provided to the Planning Board as part of the application prior to issuance of any local permits for land disturbance and construction activities.

- 9. The applicant shall provide legally binding documents for filing with the registry of deeds which demonstrate that the obligation for maintenance of stormwater best management practices and infrastructure runs with the land and that the Town has legal access to inspect the property to ensure their proper function or maintain onsite stormwater infrastructure when necessary to address emergency situations or conditions.
- 10. The property owner shall bear responsibility for the installation, construction, inspection, and maintenance of all stormwater management and erosion control measures required by the provisions of these regulations and as approved by the Planning Board.

#### J. Erosion and Sedimentation Control Standards

The purpose of these standards is to safeguard persons, protect property, prevent damage to the environment and promote the public welfare by controlling the design, construction, use, and maintenance of land during construction. These standards apply to projects approved by the Planning Board under Subdivision Review Regulations including any development or other activity which disturbs or breaks the topsoil or results in the disturbance of earth, excluding agriculture and forestry. An Erosion and Sediment Control Report and plans shall be submitted with the Subdivision Application, if applicable, and shall be prepared and certified by a licensed NH Professional Engineer. All erosion and sediment control plans shall comply with the following standards.

 Apply best management practices that accommodate the increased runoff caused by changed soil and surface conditions during construction, including strong perimeter controls and soil stabilization methods. Sediment in stormwater runoff shall be contained by the use of sediment basins or other acceptable methods until the disturbed area is stabilized. Techniques that divert upland runoff away from disturbed slopes shall be used.

- 2. Identify, locate, and show elevation, grades and/or contours at intervals of not more than two (2) feet for the existing and proposed drainage ways, drainage easements, drainage structures, and any surface water bodies.
- 3. Identify and relatively locate and include drawings and specifications for each erosion and sediment control measure and structure proposed during construction, and noting those measures that will become permanent structures retained after construction. Erosion and sediment control measures and structures shall be designed in accordance with the New Hampshire Stormwater Manual Volume 3: Erosion and Sediment Controls During Construction (NH Department of Environmental Services, December 2008, as amended) or new standards and guidance as released or adopted by the NH Department of Environmental Services.
- 4. Include drawings, details and specifications for proposed flood hazard prevention measures and structures and for proposed temporary stormwater management facilities.
- 5. Ensure that disturbance to or removal of vegetation, grading or other construction will be done in such a way that will minimize soil erosion. Whenever practical, natural vegetation shall be retained, protected and supplemented to function as buffers.
- 6. Construction sites must be stabilized within *five days* of clearing or inactivity in construction. Temporary application of seed and/or mulch may be required by the Planning Board to protect exposed critical areas during development. Techniques shall be employed to prevent the blowing of dust or sediment from the site. In areas where final grading has not occurred, temporary stabilization measures should be in place within 7 days for exposed soil areas within 100 feet of a surface water body or wetland and no more than fourteen (14) days for all other areas. Permanent stabilization should be in place no more than 3 days following the completion of final grading of exposed soil areas. At the close of the construction season, the entire site must be stabilized, using a heavy mulch layer, or another method that does not require germination to control erosion.
- 7. The agent designated by the Planning Board shall make inspections as described below and shall either approve that portion of the work completed or shall notify the applicant/property owner and the Planning Board when and how the construction activity(s) fails to comply with the approved erosion and sediment control plan. All plans bearing the stamp of approval of the designated agent shall be maintained at the site during construction. In order to obtain inspections, the applicant/property owner shall notify the designated agent at least one week <u>before</u> the following required site inspections:

- a. Proposed erosion and sediment control measures are located and staked on the site before the start of construction.
- b. Erosion and sediment control measures are in place and stabilized.
- c. Site clearing and preparation has been completed.
- d. Rough grading has been completed.
- e. Final grading has been completed.
- f. Close of the construction season.
- g. Final landscaping has been completed.

#### K. Electric and Telephone Lines

All electric and telephone lines shall be according to specifications set forth by the appropriate utility company. The approval of the utility plans by the utility company shall accompany the final plat.

#### L. Lighting

Lighting shall be installed where it is deemed appropriate by the Planning Board, subject to approval of the Board of Selectmen.

#### M. Soil-Based Lot Sizing Determination

The lot sizes for subdivisions in the Town of Kensington shall be based on the following specified criteria:

#### 1. Minimum Lot Sizes

Minimum lot sizes within all subdivisions shall, in addition to meeting the requirements of the Zoning Ordinance of the district wherein the subdivision is proposed, also meet the lot size requirements specified in this Section

#### 2. Minimum Lot Size by Soil Classification

This requirement is subject to the following qualifications:

- a. Where more than one soil type is found on a lot, a soil carrying capacity of those soils occurring on the lot shall be used to determine the minimum lot size; and
- b. Hydric soils may be used as part of the computed lot size according to the following:
  - Areas designated as poorly drained soils (type B hydric) may be utilized to fulfill the Town's minimum lot size requirement provided that a contiguous non-wetland area at least 30,000 square feet if provided for each building lot. This contiguous non-wetland area must be sufficient in size and configuration to adequately accommodate all housing

- and required utilities such as sewage disposal, water supply, and all applicable setbacks;
- Areas designated as very poorly drained, freshwater marsh or alluvial soils may not be utilizes to fulfill the minimum lot size; and
- 3. There shall be no filling of hydric soils for the purpose of providing the minimum distance between the hydric soils and sewage disposal systems.
- Minimum lot sizes for residential developments with greater than four
   (4) bedrooms per unit and for commercial and industrial developments shall be determined as follows:
  - 1. For multi-family residential use, the minimum lot size shall be proportionately smaller than the lot size indicated in Table 1 in this Section, as determined by the following formulas:
  - 2. Number of 1 and/or 2 bedroom multi-family units = Area of each soil type on the lot divided by (lot size from Table 1 in this Section, 1A/B x .65).
  - 3. Number of 3 bedroom multi-family units = Area of each soil type on the lot divided by (lot size from Table 1 in this Section, 1A/B x .85).
- d. For two-family dwelling use, where the total number of bedrooms in the building exceeds 4, the lot size shall be increased by 50% of the minimum lot size as determined by the Table 1 in this Section.
- e. For commercial and industrial uses with residential-type waste, the lot sizes will be determined by the formula:

Lot Size = 
$$\frac{Q \text{ (gpd)}}{600 \text{ gpd}}$$
 X Lot Size from the Table 1 in this Section

where: Q = gallons of wastewater to be discharged per day. The amount of flow will be determined by use of Env-Ws 1008.02 Average Daily Flow Volume.

f. Final subdivision plan approval for commercial/industrial developments which generate wastes of such nature and character as to require state or federal permits for pre-treatment and discharge or sub-surface disposal shall not be granted until all such permits are secured provided, however that conditional approval may be granted per NH RSA §676:4, I (i). The conditions upon which such permits are issued shall comply with state and local regulations and be made part of the record before the Planning Board.

#### 3. Determination of Soil Type

- Tests for determining soils information for use in this Section shall be performed by a New Hampshire certified Soil Scientist using on-site inspections.
- ii. Soil map using the standards of "High Intensity Soil Maps of New Hampshire" shall be provided as part of the subdivision plan at the scale and dimensions required.
- iii. All costs of performing such investigations shall be borne by the subdivider.

#### 4. Relationship Between State and Local Regulations

Where both State and local regulations are applicable, the more stringent regulation shall apply. If the State regulation addresses an issue not included in the local regulation or if the local regulation addresses an issue not included in the State regulation, that regulation shall automatically apply.

Table 1: Minimum Lot Size by Soil Classification

Slope

Soil Type	B (0%-8%)	C (9%-15%)	D (16%-25%)	E (>25%)
111-H	35500	42000	51500	68000
112 H	35500	42000	51500	68000
11X-H	68000	76000	86000	100000
121-H	35500	42000	51500	68000
122-H	35500	42000	51500	68000
12X-H	68000	76000	86000	100000
161-H	35500	42000	51500	68000
16X-H	68000	76000	86000	100000
211-H	35500	42000	51500	68000
212-H	35500	42000	51500	68000
213-H	68000	76000	86000	100000
21X-H	68000	76000	86000	100000
221-H	44500	56000	68000	86000
222-H	44500	56000	68000	86000
223-H	68000	76000	86000	100000
22X-H	68000	76000	86000	100000
231-H	44500	56000	68000	86000
233-Н	68000	76000	86000	100000
23X-H	68000	76000	86000	100000
241-H	68000	76000	86000	100000
243-Н	68000	76000	86000	100000
24X-H	68000	76000	86000	100000
251-H	68000	76000	86000	100000
253-H	68000	76000	86000	100000

25X-H	68000	76000	86000	100000
261-H	44500	56000	68000	86000
263-H	68000	76000	86000	100000
26X-H	68000	76000	86000	100000
275-H	44500	56000		
311-H	44500	56000	68000	86000
312-H	44500	56000	68000	86000
313-H	68000	76000	86000	100000
31X-H	68000	76000	86000	100000
321-H	44500	56000	68000	86000
322-H	44500	56000	68000	86000
323-H	68000	76000	86000	100000
325-H	68000	76000		
32X-H	68000	76000	86000	100000
331-H	44500	56000	68000	86000
333-H	68000	76000	86000	100000
33X-H	68000	76000	86000	100000
341-H	68000	76000	86000	100000
343-4	68000	76000	86000	100000
34X-H	68000	76000	86000	100000
351-H	68000	76000	86000	100000
353-H	68000	76000	86000	100000
35X-H	68000	76000	86000	100000
361-H	44500	56000	68000	86000
363-X	68000	76000	86000	100000
36X-H	68000	76000	86000	100000
375-H	44500	56000	68000	86000
411-H	44500	56000	68000	
412-H	44500	56000		
413-H	68000	76000		
41X-H	68000	76000		
421-H	68000	76000	86000	
422-H	68000	76000	86000	
423-H	68000	76000	86000	
42X-H	68000	76000	86000	
431-H	68000	76000		
433-H	68000	76000		
43X-H	68000	76000		
441-H	68000	76000		
443-H	68000	76000		
44X-H	68000	76000		
451-H	68000	76000		
453-H	68000	76000		
45X-H	68000	76000		
461-H	68000	76000		
463-H	68000	76000		

46X-H	68000	76000		
475-H	68000			
511-H	44500	56000	68000	
512-H	44500	56000		
513-H	68000	76000		
51X-H	68000	76000		
521-H	68000	76000	86000	
522-H	68000	76000	86000	
523-H	68000	76000	86000	
52X-H	68000	76000	86000	
531-H	68000	76000		
533-H	68000	76000		
53X-H	68000	76000		
541-H	68000	76000		
543-H	68000	76000		
54X-H	68000	76000		
551-H	68000	76000		
553-H	68000	76000		
55X-H	68000	76000		
561-H	68000	76000		
563-H	68000	76000		
56X-H	68000	76000		
575-H	68000			

The soil types listed below have one or more limiting characteristics that make the soil type "NA" or require on-site investigation, no matter what other characteristics of the soil may be present.

Minimum Lot Size
NA, very poorly drained soil, Type A hydric
NA, fill does not meet the Standards for Fill
Material (see Key to Soil Types)
On-site evaluation needed

The <u>Soil Type</u> symbols are explained in "High Intensity Soils Maps for New Hampshire, Standards and Origins. SSSNNE Special Publication No. 1.

<sup>&</sup>quot;NA" means not allowed.

<sup>&</sup>quot;\*" means any slope or any number.

#### N. Fire Protection

#### Applicability

These fire protection standards shall apply to all new or redeveloped commercial developments and major residential subdivisions (4 or more lots). If located more than 2,000 feet from a credible water supply, a yearround fire protection system or water supply shall be provided and approved by the Fire Chief or designee. For minor residential subdivisions (3 or fewer lots), the Fire Chief will review these applications to determine availability of a credible water supply, and if such water supply is not available, the application shall provide a fire protection system or water source capable of servicing all lots, that are not served by municipal water and/or not having a credible water supply within the required distances to provide year-round fire protection as determined by the Fire Chief or his designee. A credible water supply is such that there is a minimum of 30,000 gallons of useable water available at all time throughout the year and the pumping connection is accessible at all times. Calculation of a credible water supply shall be consistent with requirements in the NFPA 1 Uniform Fire Code, NFPA 1142 and the Insurance Services Organization fire protection rating handbook (refer to (www.nfpa.org/codesand-standards for these reference materials). In the case of a change in commercial use (as defined in NH State Fire Code NFPA 101 Life Safety Code, current editions as adopted by the NH State Fire Code available at www.nh.gov/safety/divisions/firesafety/legal/index.html), expansion of an existing commercial use, the Redevelopment and Fire Chief may require a new or larger cistern be installed that complies with these standards.

#### 2. Permits

A permit shall be obtained for installation of each cistern or fire pond/hydrant. Permits shall be obtained through Kensington Fire Rescue (KFR) before installation begins. A fee of \$75.00 for each permit (site) shall be paid at the time of the application.

#### 3. Plans

A completed hydrant/cistern permit application, four (4) sets of engineered subdivision plans, including manufacturer literature/specifications, warranties and one (1) original copy of an access easement shall be submitted for each cistern to be installed for review and approval by the

Kensington Fire Rescue and the Town Engineer. The subdivision plans shall include the following:

- a. Must be signed and stamped by a NH Licensed Professional Engineer.
- b. Design shall be in accordance with Kensington Fire Rescue requirements, NFPA 1142 Standard for Water Supplies for Suburban and Rural Firefighting U.S. Department of Transportation, Underwriters Laboratory, and American Society for testing and Materials standards available on the National Fire Protection Association website at <a href="https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=1142">https://www.nh.gov/safety/divisions/firesafety/legal/index.html</a>.
- c. Subdivision plans must show the location of the cistern(s) and easement for cistern, it's maintenance and possible future removal. Easement shall be a minimum of 10 feet measured from outside edge of tank on all sides and shall include access to the tank or pond as needed. All easements shall also be on file with the Planning Board and Selectmen of Kensington, NH.
- d. For any structures other than 1 and 2-family residential dwellings, provide location and horizontal and vertical dimensions, including gross floor area, of existing and proposed structures and buildings to be served by the hydrant/cistern system.

#### 4. Cistern Locations

All cisterns shall be in place and fully operational and approved prior to any combustible materials being stored on site or framing building permits issued. For developments that are being done in phases, fire cisterns shall be in place and fully operational for the phase currently under development, prior to combustible construction beginning.

The location of all cisterns shall be reviewed and approved by KFR prior to approval of a Subdivision application and installation of any cistern or hydrant. Any cistern that is installed prior to the issuance of a permit from KFR or installed in the wrong location shall be excavated, removed and installed in the proper location unless approved by the Fire Chief and Planning Board as necessary. The work shall be done by NH licensed engineer and the complete cost of this work shall be borne by the contractor, developer and/or owner.

Cisterns shall be located no more than 1,500 feet from the farthest buildable lot line of the furthermost lot and spaced every 1,500 feet along the roadway or private internal access or service road throughout the development. The spacing of cisterns and hydrants may be increased or eliminated if the contractor, developer, and/or owner installs NFPA 13, 13R or 13D compliant sprinkler systems (as applicable) in the facility and all individual houses within the development. Adjustments to the cistern spacing requirements may be made by the Fire Chief on a case-by case basis.

The contractor, developer and/or owner shall be responsible for annual maintenance of all cisterns including but not limited to: filling, repairing, testing and snow removal, and until the roadway is officially accepted by the Town of Kensington (if applicable). If it is not maintained, the town reserves the right to bill the contractor developer and/or owner for maintenance, testing repair or snow removal.

#### Vehicle Pad

The vehicle pad and approach shall be constructed of a hard, all-weather surface such as bituminous pavement or concrete meeting DOT standards and Town of Kensington road requirements. The pad and approach shall be designed so water will shed away from the pad and approach.

The vehicle pad shall be of sufficient length to permit easy access to suction and fill piping when the apparatus is set to forty-five and ninety degrees to the road, and with no more than 15 feet of suction hose from the engine to the suction connection (typical is 40 feet in length with a 12-foot tapered depth).

The pitch of the shoulder and vehicle pad from the edge of the pavement/roadway to the pumper suction connection shall be one percent to six percent downgrade.

A permanent "NO PARKING" sign shall be installed at the vehicle pad with arrows as approved by KFR.

#### 6. Cistern Specifications

All cisterns and supporting components shall meet the following specifications:

a. Shall be composed of single wall fiberglass or concrete.

- b. Minimum size capacity for a cistern shall be 30,000 gallons of <u>useable</u> water (defined as water that can be pumped from the tank without losing prime).
- c. The specifications shall carry a minimum lifetime warranty of 25 years.
- d. Have a float gauge approved by KFR installed visibly from the end of the suction pipe.
- e. Capable of flowing 1000 gpm for 75% of their water capacity.
- f. Be protected from vehicular traffic. Bollards shall be placed along the entire length of the vehicle pad. Bollard construction shall be steel, concrete reinforced 8 inches in diameter and five feet high. Bollards shall be painted with a rust inhibitor and then painted red.
- g. Suction and fill piping shall be supported by either the top of the tank or below the frost line.
- h. Horizontal piping shall be pitched toward the tank to allow for drainage.
- i. Exterior piping (from the tank) shall be painted with a rust inhibitor and then painted red.
- j. A metal (rebar) or fiberglass (with stainless steel spring) marker a minimum of six feet high from grade, outfitted with two four-inch blue reflective tape shall be installed on the suction pipe no more than two feet from the threaded end of the pipe. (removeable units at suction threads are allowed and recommended).
- k. Designed or installed so the cistern will not float when empty. These design specifications shall be shown on the plans when submitted.
- I. Bottom of the suction piping to the center of the pumper connection shall not exceed 14 feet in height.
- m. Vent pipe shall be a minimum of 4-inch diameter schedule 80 PVC or schedule 40 steel. Vent pipe shall have a bug-resistant screened opening and will be positioned to reduce condensation (pointing down). The vent pipe height is to be determined by approved drawings.
- n. Fill pipe shall be minimum four-inch schedule 80 PVC or schedule 40 steel and supported to withstand the weight of a filled four-inch supply line. The fill pipe connection shall be no more than 36 inches above grade and shall have a four-inch Storz connection with 30-degree elbow pointing down with a cap and chain.
- o. Suction pipe shall be six-inch minimum schedule 80 PVC or schedule 40 steel. Above the tank, the pipe will remain vertical until a 90degree long sweep establishes a horizontal direction. Height of the suction pipe shall be 24 inches from finished grade to the center of the suction connection. The suction pipe will then be reduced to a

- four and one-half inch  $(4 \frac{1}{2})$  NST male thread. A cap shall be provided and will have "ears" for removing same.
- p. All elevations of all piping are based from finished grade of the pad to the center of the pipe.
- q. Provide a manway inspection hatch that has welded tabs so it can be locked with a padlock (Knox-Box lock) or an approved security bolt system. Locks shall be approved by KFR or two sets of access equipment/wrenches shall be provided to the Department upon completion.
- r. Waterproofed and installed in accordance with the manufacturer's specifications, and a certification letter showing same shall be provided to the Fire Department before inspections.
- s. Rated for highway loading and withstand surface loads of H-20 axle loads.

#### 7. Water Supply

A separate well, pump, float device and meter (as applicable) shall be connected to the cistern to maintain a full level of water at all times. Minimum water flow of this device shall be 2 gpm for 8 hours and shall have an accessible disconnect and a fail-safe shutdown with a visible (from the road) red light at/near the controls showing pump failure. Piping shall be installed below the frost line or protected from freezing. If well water is unavailable in the area, documentation shall be submitted to the Planning Board and Fire Department for review and possible variance on a case-by-case basis.

#### 8. Backfill Specifications

All construction, backfill and grading material shall be in accordance with proper construction techniques/practices and acceptable to the Fire Chief and Town Engineer.

Bedding for the cistern shall consist of 12 inches of  $\frac{3}{4}$  inch to 1  $\frac{1}{2}$  inch compacted, crushed, washed stone. No fill may be used under the stone.

Cistern tanks will be backfilled with one foot of clean sand around all sides and the top of the cistern.

All other backfill material shall be screened gravel with stones no larger than 1 ½ inches diameter and must be compacted to 95% in accordance with ASTM D 1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort.

Backfill over the tanks shall have one of the following characteristics:

- a. Minimum of four feet of fill.
- b. Top and the highest two feet of the sides of the cistern shall be insulated with vermin resistant foam insulation and two feet of fill.
- c. Extend ten feet beyond the edge of the cistern, and have a maximum 3:1 slope, loamed and seeded.

#### 9. Inspections

All inspections shall be performed by both the Kensington Fire Rescue and the Town Engineer, who shall file certification letters and a full report to the Kensington Fire Chief and Planning Board showing compliance with all requirements as outlined. Inspections shall include the following construction and installation activities:

- a. Rough excavation
- b. Tie-down/strapping
- c. Backfilling
- d. Random compaction test (3<sup>rd</sup> party certificate)
- e. Leakage test (48 hours after soak-in)
- f. Well flow and stress test
- g. Pump and conditional acceptance test

After all backfilling and piping is installed, the cistern shall be leakage tested. The tank must be filled with clean water to within 1 inch of the top cover of the manway. The installer can have two days for settling and soakin, then the test shall commence. The leakage test shall be 48 hours, and the measurements shall be taken by Kensington Fire Rescue or the Town Engineer. This is a zero-leakage test. If, after 48 hours leakage is verified, the tank and/or components shall be repaired in accordance to manufacturers specifications and re-inspected by the Fire Department and Engineer.

A final acceptance test shall consist of fire apparatus pulling and maintaining a draft from the cistern for two cycles of five minutes each, followed by a flow test of approximately 1000 gpm for a minute.

Refilling the tank after testing shall be the responsibility of the contractor, developer, and/or owner. The tank shall remain filled once tested and accepted.

The well flow stress test shall consist of flowing water for a documented period to show compliance with the minimum flow requirements. All safety devices shall be tested as well.

10. Final Approval and Continued Maintenance

Once all inspections and tests have been completed and approved, the Department will conditionally accept the cistern. The conditional acceptance remains in place until the roadway is accepted by the Town.

The contractor, developer, and/or owner shall be responsible for annual maintenance of the cisterns including but not limited to snow removal until such time the roadway is accepted by the Town. If the road remains privately owned, the develop/owner shall be responsible for all annual maintenance and any required testing to ensure the system functions properly and as designed. The Town reserves the right to bill for maintenance, testing, snow removal or repairs until accepted by the Town.

#### O. Sequence of Construction

- 1. A subdivision plan must include a construction sequence describing in order, the construction steps to be followed by the developer during construction of the subdivision.
- 2. The planning board, as part of the subdivision approval process, must agree to the construction sequence.
- 3. The Town's engineer is responsible for verifying adherence to the construction sequence as part of the construction inspection process.
- 4. Each step in the construction sequence is to be individually numbered on the plan.
- 5. As-needed exceptions to the construction sequence must be agreed to in writing by at least 3 planning board representatives with consultation from the town's engineer.
- 6. A sample construction sequence follows and should be used as a guide. This sample should be modified as appropriate.

#### "CONSTRUCTION SEQUENCE GUIDELINES"

a. Contractor to notify Dig-Safe 72-Hours prior to commencement of construction.

- b. Prior to grubbing of cleared areas, all siltation barriers designed for use as temporary erosion control measures shall be installed as called for on project plans. Install stabilized construction entrance at location of construction access.
- c. Cut and clear trees and brush from construction areas to extent necessary. All branches, tops and brush to be properly disposed of by contractor according to state and local regulations.
- d. Complete grubbing operations. All stumps and similar debris shall be properly disposed of by contractor according to state and local regulations. Organic material suitable for use as topsoil shall be stockpiled in upland areas. All stockpiles shall be seeded with winter rye and surrounded with hay bales.
- e. Commence construction of site. Perform excavation activities required to achieve subgrade elevation. All excavated embankments, ditches, swales and culverts shall be installed and stabilized. Construct temporary culverts to facilitate construction activities. All such crossings shall be protected with silt fence barriers to limit and control erosion.
- f. Construct loam & seed, all open drainage facilities (ditches, swales and detention ponds) prior to any other site construction.
- g. Stabilize all ditchlines and ponds prior to directing flow into them; construct closed drainage system, septic and other subsurface utilities. Slopes and embankments shall be stabilized by tracking and temporary seeding with winter rye prior to turf establishment. All ditches, pond, and swales shall be stabilized prior to having runoff directed to them.
- h. All swales and ditchlines shall be protected from erosion by implementation of silt fences as show on project plans.
- i. Apply topsoil to slopes and other areas disturbed by construction. Topsoil used may be native organic material screened so as to be free of roots, branches, stones, and other deleterious materials. Topsoil shall be applied so as to provide a minimum of a 4-inch compacted thickness. Upon completion of topsoiling, finished sections are to be limed, seeded and mulched. Construction personnel shall inspect completed sections of work on a regular basis and remedy any problem areas until a healthy stand of grass has become established.
- j. Install finish gravel of pavement base materials.

- k. Maintain, repair, and replace as necessary temporary erosion control measures until such time as the entire construction area has been stabilized (A minimum of one year shall have passed).
- I. After stabilization, remove and suitably dispose of temporary erosion control measures.

#### P. Tree Clearing Regulation for New Development

- **1. Purpose.** The purposes of this section are:
  - a. To protect and preserve the natural environment;
  - b. To provide for green spaces of adequate proportions;
  - c. To minimize soil erosion, lesson air pollution, conserve energy, protect the quality of groundwater, and provide a habitat for wildlife;
  - d. To provide for the harmonious and aesthetically pleasing development of the municipality and its environs; and
  - e. To protect the public from hazards created by dead or diseased trees.
- 2. **Applicability.** These regulations apply only to applications for new commercial development and applications for the subdivision of land.
- 3. **Findings.** Due to the many beneficial attributes of trees in providing environmental benefits, conserving energy by reducing home heating and cooling costs, minimizing soil erosion, lessening air pollution, and providing for the aesthetic and scenic attributes of the town, the Planning Board of the Town of Kensington find that this regulation is necessary to protect the health, safety, and welfare of the citizens of the Town of Kensington and to provide for the safe and attractive development of sites in the Town of Kensington per RSA 764:36, Subdivision Regulations.
- 4. **Authority.** These regulations are promulgated under the authority of RSA 674:36, Subdivision Regulations.
- 5. **Requirements.** Every applicant for subdivision review must submit, as part of his or her application, a plan of the site, prepared by a New Hampshire Licensed Forester, depicting the following
  - a. The location and description of forested areas on the site, including a general description of the forested area including successional stage and representative species;

- b. A Natural Heritage Bureau request for the review for sensitive and/or protected species within or around the project site.
- 6. **Construction Phase Tree Protection Plan.** Every applicant shall also submit a tree protection plan, which must include:
  - a. A plan depicting areas of trees which will be lost due to proposed land alteration;
  - b. The location and number of trees to be replaced after the construction process is complete;
  - c. Methods for protection of trees before, during, and after the construction process;
  - d. Agreement to periodic inspections by an agent certified as a state licensed forester, retained by the Planning Board, at the applicant's expense, to ensure that the tree preservation plan is being followed before, during, and after the construction process;
  - e. Designation of areas to be marked as "no cut areas" on site, by permanent markers or discs placed on trees that will be retained as landscaped areas, natural buffers, conservation areas, or open space areas;
  - f. Designation of areas to be planted with shade trees or street trees along private or public ways;
  - g. In formulating the tree preservation plan, the following standards shall be adhered to. The Planning Board will use these standards in its review of the tree preservation plan:
    - i. Locate roads, building footprints, parking areas, stormwater basins, and utilities so as to minimize their impact on forested areas.
    - ii. Preserve trees in groves or clusters and preserve contiguous areas of trees recognizing that survivability is greater for groups of trees than for individuals, and recognizing that wildlife require corridors of habitat and gradual edge habitat to persist.
    - iii. Control grading and the limits of disturbance by changing the location of building pads, parking lots, and street.
    - iv. Consider the travel pathways of heavy equipment and realize the impact of such equipment on the roots systems of trees.
    - v. Provide for fencing, mulching, and other methods to enhance tree protection during the construction process.

- 7. **Allowable Tree Removal.** For initial site development, up to twenty-five percent of the total pre-harvest basal area of the site may be cut and removed for site grading, utilities installation, construction of streets and sidewalks, and construction and grading of drainage ways and storm detention areas.
- 8. For building development on individual lots occurring before a certificate of occupancy is issued, up to twenty-five percent of the remaining pre-harvest basal area of the lot may be removed without replacement. Dead or diseased trees that constitute a hazard or danger must be included in the twenty-five percent. Stumps removed should be ground or hauled off-site. This section shall not affect tree removal by individual landowners after the certificate of occupancy is issued.
- 9. **Tree Replacement.** The developer shall use native species and avoid invasive species for tree replacement. The developer shall meet with the forester retained by the town (at the applicant's expense) to develop a plan for tree replacement. Consideration shall be given to aesthetic, environmental, and energy efficiency factors in developing the plan for tree replacement.
- 10. Lot Clearance Values. For forested lots, lot clearance values assumed by the applicant's engineer in the stormwater analysis calculations of any subdivision should be noted on the plan. These assumed areas of clearance shall become the limit of clearable area for each lot for that subdivision or the total clearance area of the site for other development, in accordance with the standards above for all allowable tree removal.
- 11. **Inspections**. The designated forester retained by the town shall inspect the site, before, during and after construction to ensure that the applicant is following the tree preservation plan. The inspections are to continue after construction for a period of three years, on an annual basis, to assess the need to replace damaged or diseased trees.
- 12. **Tree Bond**. The applicant shall post a bond in an amount sufficient to cover the costs of inspection and tree protection before, during, and after the construction process and to replace any damaged or diseased trees for a period not to exceed three years after the construction process is complete. The applicant may apply for a bond reduction periodically as warranted by completion of successive phases of the construction process.

#### Q. Construction Plans

Construction plans shall be prepared for all required improvements. Seven (7) construction plan sets shall be submitted to the Town. Applicant must receive approval prior to construction commencement from the following parties, including but not limited to: Town Engineer, Building Inspector, Fire Department, Road Manager and Police Department. Plan sheets shall conform in size to the submission requirements, and shall show the following:

#### 1. Plans

Plans of all areas to be disturbed for construction of streets, drainage ways and structures, electric and utility lines, erosion and sediment control structures, and other areas to be disturbed for the construction of necessary improvements shall be drawn at a scale of not more than fifty (50) feet to the inch and show:

- a. Existing topography in dashed lines and proposed contours in solid lines at two (2) foot intervals, plus spot elevations;
- b. Soil types and boundaries in dotted lines;
- c. Existing tree lines and proposed trees and all other plantings;
- d. Edge of all paved areas;
- e. Location and size of all structures, piping and other materials;
- f. Center line stations of all proposed roads at fifty (50) foot intervals; and
- g. Location of all adjacent lot lines with lot numbers as assigned on the appropriate preliminary or final plan.
- 2. Profiles of all proposed **roadways**, showing existing and proposed elevations along the center line of all proposed roads; and all structures, piping and other materials. Profiles shall be drawn at fifty feet to the inch horizontal and five (5) feet to the inch vertical scale.
- 3. Cross-sections of all proposed roadways at fifty (50) foot stations and at all catch basins or culverts showing:
  - The roadway and all areas to be disturbed for construction of proposed roadways;
  - b. Proposed subgrades;

- c. Existing grades and proposed final grades; and
- d. All utilities and other structures.
- e. Cross sections shall be drawn at a scale of not more than ten (10) feet to the inch horizontal, and five (5) feet to the inch vertical.
- 4. Construction details for all roadways, curbing, drainage structures, erosion control structures, and any other required improvements shall be drawn and shown at a convenient scale.
- 5. Plans and other information indicating how increased runoff, sedimentation and erosion shall be managed and controlled during and after construction of required improvements.
- 6. Sequence of Construction, per these Regulations.

# \*\*\*\*CONSTRUCTION CHECKLIST\*\*\*\* NOTES

- 1. All construction materials and methods shall be as per NH DPW Specifications unless modified herein.
- 2. Material used for the construction of roadway fills shall have the physical characteristics of soils designated as group A-1-a, or A-3 under AASHTO M145.
- 3. Road base material (bank run and processed gravel) shall be sampled on-site and tested by an independent test laboratory. Samples must meet applicable NH DPW specifications or it shall be replaced.
- 4. Where under drains are required, they shall be installed in the ditch line. The pipe shall be a minimum diameter of 6 inches, and be made of corrugated perforated metal; the invert shall be a minimum of 3 feet below the finished grade of the ditch; the pipe shall be completely surrounded with 6 inches of pea stone, and the remainder of the trench shall be backfilled with clean sand to within 6 inches of the finished grade of the ditch; the pipe, stone, and sand shall all be wrapped in a geotextile filter fabric. Under drains must be inspected prior to backfilling.
- 5. A 1/4 inch tolerance is allowed for the fine grading of the crushed gravel and placement of the bituminous concrete. However, the finished pavement depth must be at least equal to or greater than the depth specified on the approved plan.
- 6. Material specifications and/or construction methods may not be waived by any Agent of the Planning Board.
- 7. Compaction testing, gradation tests, core samples, As Built inverts and Cross Section data must be obtained, certified, and submitted by the applicant's Engineer/Surveyor.

# CONSTRUCTION CHECKLIST

Construction Stage	Minimum Required Survey Control	Minimum Required Equipment	Minimum Requirements	Testing
Earthwork (Cut/fill)	Grade stakes every 50 feet along center line of ditch; Benchmarks every 300 feet along roadway	As required; Vib Roller Required for Fills Greater than 3 feet	Fill not to be placed until foundation area approve; 6 inch lifts; see notes for fill material requirements	Gradation Compaction
Subgrade	Grade stakes every 50 feet along center line of ditch; Benchmarks every 300 feet along roadway	Bulldozer; Front End Loader; Roller	Shape and compact road bed with crown from ditch line to ditch lines; shape back slopes; Geotextile fabric may be required if subgrade is unstable	Compaction; As Built Cross Section
Drainage	As Needed	Excavator; Hand Compactors; Front End Loaders	As Per Plan	As Built Inverts; Compaction; Underdrains to be inspected prior to Backfilling
Bank Run Gravel	1st 12 inches Grade stakes every 50 feet along centerline of ditch; benchmarks as above	Road Grader; Vib Roller; Road Grader; Water Wagon	Place, shape and compact; in 6 inch lifts; 3 <sup>rd</sup> 6 inch list to be fine graded within ½ inch of required grade	Compaction; Gradation; As Built Cross Section on 3 <sup>rd</sup> 6 inch lift Sieve analysis per NH DPW Specifications

Crushed Gravel	Grade stakes every 50 feet, two feet off back of shoulder; benchmarks as above	Road Grader; Vib Roller; Water Wagon	Place, shape and compact; to be fine graded within ¼ inch of required grade (See Notes)	Compaction; Gradation; As Built Cross Sections Sieve analysis per NH DPW Specifications
Paving	Edge and radius points marked; As Built Cross Sections of the Crushed Gravel before paving	Self-propelled Paver; Static Roller (Min 10 ton)	Place, shape and compact to within ¼ inch of required grade (See Notes)	Core Samples and As Built Cross Sections on Binder and Top

# APPENDIX A Recommended Letter of Credit

Sample Letter of Credit

{lender letterhead}

{Date}

Town of Kensington Planning Board

95 Amesbury Road

Kensington, NH 03833

Re: IRREVOCABLE LETTER OF CREDIT

{Applicant}

{Applicant's Address}

Dear Kensington Planning Board Members:

By this document {name of lender} (hereinafter "issuer"), hereby issues an irrevocable letter of credit in the amount of {spell dollar amount} (\$####) to the Town of Kensington, New Hampshire on behalf of {Applicant} (hereinafter ca1led "developer"). This irrevocable letter of credit is issued to guarantee completion of all improvements required by the Kensington Planning Board and the Kensington Planning Board Land Development Regulations in conjunction with the construction of {name of project}, in accordance with a {subdivision plan} entitled {plan title} dated {plan date}, and {approved or conditionally approved} by the Kensington Planning Board on {date}. Said approved plan contains {spell number} (##) sheets of engineering drawings.

1. It is understood that the improvements guaranteed by this irrevocable letter of credit include but are not limited to the following:

- a. Construction of {####} linear feet of new street in accordance with Sheets {#, #, #, #, #-#} of said plan.
- b. Construction of {####} feet of waterline as shown on. Sheets {#,#} of said plan.
- c. Construction of all drainage improvements shown on said plan inc1uding the improvements on Sheets {#, #, #, #-#}.
- 2. If all improvements guaranteed by this letter of credit are not completed by midnight {date two years hence}, and if a certificate indicating satisfactory completion and Planning Board approval of all improvements has not been issued by the Kensington Planning Board, then the developer shall be deemed to be in default of the obligations guaranteed by this letter of credit. In such case, this letter of credit shall be automatically considered to have been called, and, without further action of the Kensington Planning Board or the Town of Kensington, the {name of lender} shall forthwith forward a check in the amount of \$##### to the Treasurer of the Town of Kensington. The funds so forwarded to the Town Treasurer shall be used exclusively for the purpose of completing the improvements which are guaranteed by this letter of credit. Any funds not needed by the Town to complete the improvements guaranteed by this letter of credit shall be returned to the {name of lender}.
- 3. The amount of the credit issued by this letter may be reduced as improvements are satisfactorily completed by the developer. Such reductions shall be made only pursuant to submittal of a fully executed Request for Letter of Credit Reduction per Exhibit I. Such requests shall be submitted prior to the first Tuesday of the month in order to be acted upon by the Planning Board at its following regular meeting, which is the third Tuesday of each month. A request shall be signed by the developer and shall include the certification of a professional engineer licensed in New Hampshire as to the amount of remaining incomplete work and the estimated cost of completion. The Planning Board shall have the sole discretionary authority to approve or deny or adjust the requested reduction. In no case shall the credit be reduced to an amount less than \$##### (25% of the original amount). If the credit issued by this letter has been reduced, and if this letter is called pursuant to Section 2 above, the amount of funds to be forwarded to the Town by the issuer shall be in the amount of the credit balance, as reduced.
- 4. The face amount of this irrevocable letter of credit shall be automatically reduced to \$##### (25% of the original amount) upon receipt by the {name of lender} from the Kensington Planning Board of a certificate indicating satisfactory completion and Planning Board approval of all improvements covered by this letter. Thereafter, the amount of credit provided by this letter shall guarantee said improvements against failure to function as designed. In the case of any such failure, the Planning Board may submit drafts against this irrevocable letter of credit, and the issuer shall forthwith forward to the Treasurer of the Town of Kensington a check for the